

# MANUFACTURERS' RECORD.

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## Manufacturers' Record.

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BALTIMORE, JULY 20, 1894.

THE MANUFACTURERS' RECORD, of Baltimore, is doing a great work for the development of the South. Its editor, Mr. R. H. Edmonds, is thoroughly acquainted with the resources of this section, and every issue of the MANUFACTURERS' RECORD contains something which is calculated to attract capital and turn the tide of the right sort of immigration to the South. The MANUFACTURERS' RECORD deserves the support of the people of the South, and we are glad to know that it is receiving it in large measure.—Atlanta (Ga.) Journal.

### The Southern Appalachian Region.

In this issue of the MANUFACTURERS' RECORD Mr. H. B. Wetzell, of Knoxville, a Pennsylvanian by birth, who for ten years has been making a careful study of the resources and attractions of the southern Appalachian region, tells something about the wonders of that favored land. The glowing tribute paid by him to this wonderful country will be fully endorsed by every man who, like Mr. Wetzell, will make a personal investigation of it. In all the world there is probably no other region so favored by nature; no other region combining such a variety of resources so susceptible to utilization at the lowest possible cost, and so attractive as a place of residence. It was of this region that Judge Kelley, shortly before he died, said: "It is a country upon which the Almighty has with most lavish hand bestowed His richest material gifts. It is the most beautiful and the richest portion of God's earth upon which my vision or feet have ever rested." This region is but in the infancy of its development. Its future growth no one who knows it from careful study would dare attempt to portray. With a soil that yields abundantly, even to the very top of the highest mountain peaks; covered with vast forests of virgin timber, having a greater amount of hardwood than any other section of this country, with mineral resources probably nowhere else equalled in variety and abundance, there

are wealth-creating possibilities that in the future must give such prosperity to all that section as no other part of our country has ever enjoyed.

### The South's Manufacturing Possibilities.

We must never forget, however, that the South is and will continue to be in the main an agricultural country, and there is a wider field for improvement and for the accomplishment of practical good along this line than any other.—Memphis Commercial.

THE MANUFACTURERS' RECORD fully recognizes the almost unlimited agricultural capabilities of the South. It realizes fully that the soil of this section can be made to produce more than the entire present value of all the agricultural products of the United States. But, even granting this, it seems strange that some Southern papers do not yet comprehend the industrial possibilities of this section. It is an accepted fact, disputed by no one, that nowhere else in the world is there such a foundation for manufacturing development as the South possesses. In no other country are cotton, coal, iron and timber found in such great quantity and so cheaply utilized in the production of manufactured goods. In this section we find the combined advantages for manufacturing possessed by all other countries. Practically no limit can be set to the expansion of the South's industrial interests. It is not by any means an exaggeration to say that the middle-aged man of today may yet see the South producing greater value in manufactures than the whole country does now. The magnitude of such a growth as this can best be appreciated when it is remembered that in 1890 the total value of manufactured products for the country was \$9,300,000,000, while the total value of all agricultural products for the same year was \$2,460,000,000. As recently shown in the MANUFACTURERS' RECORD in reply to a statement very much similar to this of the Memphis Commercial, the one State of Massachusetts, small in area and without a single natural advantage for manufactures, had invested in 1890 \$620,000,000 in industrial pursuits, against \$659,000,000 for the fourteen Southern States. The factory hands of the entire South received in that year \$220,000,000, against \$239,000,000 for those of Massachusetts. Pennsylvania, whose area is 6000 square miles less than that of the one State of Alabama, and has less than one-tenth as much standing timber as Alabama, less coal and less iron—the three great foundations for manufacturing growth—and has no cotton, had in 1890 over \$990,000,000 invested in manufacturing, against \$650,000,000 for the entire South—a difference in favor of that one State as compared with the fourteen Southern States of \$340,000,000. These comparisons simply show the possible extension of manufacturing interests in the South. With unequalled

natural advantages, with a rate of growth that assures a most marvelous advance in the future, with the tide of capital and population turning southward, this section is destined to undergo a rate of development unequalled in the history of our country. As great as may be the increase in agriculture, the manufacturing possibilities are so much vaster that we can scarcely appreciate the future of the South.

### Important Action by the Baltimore Corn and Flour Exchange.

The Baltimore Corn and Flour Exchange, which, as stated in the last issue of the MANUFACTURERS' RECORD, is the leading trade organization of this section, having a membership of about 800 of the foremost business men of the city, not content with the ringing resolutions passed last week urging upon Congress immediate action upon the Nicaragua Canal, decided on July 17 that the importance of this subject justified still more urgent efforts, and it was unanimously resolved to telegraph the senators and representatives from Maryland as follows:

Please use your influence to prevent adjournment until Nicaragua Canal bill is voted upon. This is important to our State and city.

As valuable as the Nicaragua Canal would be to Baltimore, its value to the more southerly States and to the West would be still greater. No other enterprise is of such transcendent importance to these sections as this canal. In an interview a few days ago with the president of one of the leading financial institutions of the country, he expressed his amazement at the apparent indifference and apathy with which the South treats the Nicaragua Canal question. "In view of its vast importance to that section and of the revolution in the business interests of the world in favor of this country, and especially of the South," said he, "I cannot comprehend the slowness of the South in bringing such pressure to bear upon Congress as will compel its attention to this matter without delay. When New England finds the need of some legislation of vital interest to its business life, it wisely presses the matter upon public attention until it secures what is wanted; while, on the contrary, the South having before it and practically within its grasp the possibility of securing this canal, its failure to take the most vigorous action is incomprehensible." "It is not," said he, "a party measure, for while it has been vigorously advocated by the republican party and heartily endorsed by republican presidents, it has received even stronger commendation, if this were possible, from the democratic party. President Cleveland has urged its construction, the democratic platform has advocated it, but unless the democrats pass the bill and thus secure the credit

for inaugurating what, as Senator Morgan said, will prove the crowning glory of the nineteenth century, we may rest assured that if the republicans ever have the opportunity they will pass the bill and thus secure the credit. In the meantime, however, the country suffers and the development which would be inaugurated by the construction of the canal is delayed."

No one who studies the question and who sees the danger of this matter being delayed simply by default can do otherwise than, like this financier, marvel that the South does not rally to its support so vigorously as to demand of Congress its prompt construction. Unless the most overwhelming pressure is brought to bear upon Congress by the people of the South generally, especially the business men and press, it is much to be feared that there will be no congressional action, and the Nicaragua Canal will not be built unless the offers of financial assistance from abroad be accepted, and then, as ex-Governor Hubbard, in his letter to Senator Morgan, published recently, said, "we shall have to face the Monroe doctrine."

If every trade organization in the South and every business man vitally interested in that section would take such action as the Baltimore Corn and Flour Exchange has done success would probably be assured. Every man in the South wants the canal. As a leading cotton manufacturer said to the writer a few days ago, "we must have it; the South absolutely needs the markets of Asia opened to us by the canal; it must be built;" but, like many others, he has never made a move in its behalf nor written a letter to any congressman urging its construction. How many thousands of other Southern business men are in the same position?

### An Advance Movement in Behalf of the South.

The organization of the Southern Exchange Association in New York, as given in full elsewhere in this issue, promises to prove one of the most important steps ever taken in aid of Southern advancement. It is a bold effort to command the attention of the North in the interest of the South by an association with headquarters in the business and financial centre of the country. It only needs right management to insure its proving a powerful factor in increasing the prosperity of the South, and this seems to be guaranteed, considering the men who are responsible for the direction of its affairs. This undertaking is a move in the right direction. The South now has the chance of having its advantages and resources pressed home upon the people of the country persistently and vigorously, and with the hearty co-operation of everyone interested in the prosperity of this section an



immense amount of good will be accomplished. The South must not, however, expect the North to do all the work. This section must lead in putting into active existence all the forces that can be brought to bear in carrying on this movement.

### Southern Business Conditions.

The most convincing proof of the upward tendency of Southern business interests is found in the bank clearings. For the first time in many months they show an increase in any section over the corresponding week of the preceding year, and this section is the South. The clearings for the entire country for the week ended July 7 show a net decrease as compared with the same week of 1893 of 11.4 per cent. Stated in tabular form, the returns for the week were as follows:

|                            |               |      |
|----------------------------|---------------|------|
| New York.....              | Decrease..... | 14.9 |
| New England States.....    | ".....        | 10.5 |
| Middle States.....         | ".....        | 5.0  |
| Middle Western States..... | ".....        | 6.7  |
| Pacific States.....        | ".....        | 23.8 |
| Other Western States.....  | ".....        | 10.6 |
| Southern States.....       | Increase..... | 2.8  |

A more striking commentary upon the business conditions of the South as compared with those of other sections could not be presented. During the week nine Southern cities showed an increase over the corresponding week of last year, the gain at Baltimore having been 11.2 per cent., New Orleans 9.4, Louisville 20.4, Galveston 1.2, Richmond 9.6, Savannah 28.8, Memphis 11, Waco 60.6, Fort Worth 51.7, Jacksonville 19.

Telegraphic reports from the seven leading cities of the country for the week ended July 14 make the following showing:

|                   |               |      |
|-------------------|---------------|------|
| New York.....     | Decrease..... | 19.2 |
| Boston.....       | ".....        | 2.1  |
| Philadelphia..... | ".....        | 7.3  |
| Chicago.....      | ".....        | 15.3 |
| Baltimore.....    | Increase..... | 9.0  |
| New Orleans.....  | ".....        | 2.2  |
| St. Louis.....    | ".....        | 1.3  |

Out of the seven leading cities, the only ones for which the clearings for the week ended July 14 are available by telegraph, four showed a decrease and three an increase. All of the former were in the North and West, and all of the latter in the South, Baltimore leading with an increase of 9 per cent.

Turning from the clearing-house returns as published by the Commercial and Financial Chronicle, from which these figures are gathered, to the report of the railroad earnings, the comparison is equally as favorable to the South:

| Roads.                       | Decrease in gross earnings in June. | Percentage of decrease |
|------------------------------|-------------------------------------|------------------------|
| Trunk lines.....             | \$1,801,998                         | 18.84                  |
| Middle & Middle Western..... | 1,104,760                           | 27.80                  |
| Pacific.....                 | 1,445,550                           | 36.51                  |
| Northwestern.....            | 1,774,335                           | 23.77                  |
| Southwestern.....            | 2,377,107                           | 26.85                  |
| Southern.....                | \$68,233                            | 9.18                   |

Commenting on these figures the Commercial Chronicle very justly says: "Notwithstanding the smaller cotton movement, Southern roads did better than those of any other group, the loss being very much smaller than the losses in any other section, and as contrasted with the loss in other groups, the difference in favor of the South is very decided."

The report of the gross earnings of all railroads in the United States from January 1 to June 30 shows a gain on twenty-two lines. Of this number, fourteen of these roads are in the Southern States.

Everything tells of the turn of the business tide in the South.

### The Nicaragua Canal.

It is reported on what seems to be good authority that the people interested in the Nicaragua Canal Construction Co. are opposed to the passage of any bill to give government aid to the enterprise, but that they cannot well afford to openly say so. This report says that all of the money can be had from abroad on terms much more favorable to the promoters than those of the bill in Congress. This, however, would put the control in foreign hands. The MANUFACTURERS' RECORD does not know of a certainty as to the correctness of these reports, but they come to it from sources that ought to be entirely reliable. The promoters cannot, however, openly oppose the bill in Congress without showing their hand, but that there has been and is now great apathy and indifference on their part is generally admitted. If Congress should fail to act there would be no ground on which, as Americans, we could rightly complain if foreigners should furnish the capital and secure control. That the money has been offered on one or two occasions in the past is very generally known, and the report now is that the last offer carries with it, as already said, a much larger profit to the promoters than they can possibly get through government aid to the canal. For the capital to be furnished by foreigners would be a national misfortune. Sooner or later it would necessarily involve our country in complications that would in all probability lead to war, even if the very signing of a contract for the money did not arouse such opposition in this country as to delay the building of the canal for years. A bill to ensure the construction of the canal should be passed at this session of Congress.

The New York Mail and Express, in discussing this feature of the situation, says:

The construction of the Nicaragua Canal is the most important question before the American people today. It involves the greatest future consequences for the welfare of our people. It has nothing to do with any party and it is in the interest not of one, but of every section of the country. Moreover, it is a question which has reached a critical stage. We must immediately decide it in our favor or it will decide itself against us. We have so long been used to a policy of dalliance with this project that it is hard for our people to realize that conditions have changed. But the time limit of the concessions is fast slipping away. A large sum has already been expended, a sum too large to be sacrificed, and to save it the canal company must seek aid abroad if the United States government fails to sustain the undertaking. We must remember also that the canal company, from a financial standpoint, has little interest in the absorption of the enterprise by the government. It would in that event get paid for what it has done; it would save its investment, but it would almost certainly be larger gainer by offering its privileges abroad. Capital is not patriotic, and whoever relies upon the patriotism of the Nicaragua Canal Co. to use its endeavors to the utmost to keep this enterprise in the hands of Americans will find that he has been reckoning without his host. Its main interest in the doings of Congress is not to force the passage of some bill which will save this canal to the American people, but to guard against provisions being incorporated in the bills proposed which would enable the government to acquire the concessions and plant too cheaply.

If Congress is to be convinced what its duty is, and that it is necessary for it to perform its duty, this conviction must be forced upon it by the people of the United States, who will be the greatest beneficiaries of the canal when built. Out of all the bills which have been presented to Congress to provide for this canal, one can surely be derived which will meet the case fairly and give to America the assurance of another period of marvelous growth to be numbered among the brilliant epochs of our industrial expansion.

### SENATOR WALSH'S ENDORSEMENT.

#### His Views on the Nicaragua Canal.

The Wonderful Prosperity that Its Construction Would Inaugurate.

The Nicaragua Canal finds in United States Senator Patrick Walsh, of Georgia, an enthusiastic advocate. On being interviewed by the MANUFACTURERS' RECORD Mr. Walsh said:

"I am very much in favor of the canal enterprise. It is of vital importance to the commerce of the United States. The South is deeply interested in the construction of the Nicaragua Canal. With its completion I see no reason why this country should not control the trade of Central and South America. Our geographical position, the similarity of our political institutions and the assertion and maintenance of the Monroe doctrine would enable the manufacturers and merchants of the United States to do business to the best advantage with the people of Mexico, Central and South America. The contiguity of the ports of the South should give our people the advantage in trade with the people south of us. Viewed in every light the construction of the Nicaragua Canal should receive the support of the people of this country. The Congress of the United States should, in my judgment, approve of this great international enterprise. What the Suez Canal is to the commerce of Europe the Nicaragua Canal would be to the commerce of the United States. Our people, irrespective of party, should, in my opinion, unite in support of the Nicaragua Canal.

"When the possibilities of securing the trade of the Orient are considered, vast fields are opened up for the products of this country. There are over 700,000,000 people in China, India and the other countries of the East who will be brought 10,000 miles nearer to the people of the United States. China has a population of 400,000,000; India, 250,000,000; Japan, 70,000,000. The populations of Corea, Australia and Oceania amount to many millions more. We must find new fields for our products of the field and factory. The Nicaragua Canal would bring Asia so much nearer to the United States for commercial purposes that I am strongly in hopes that Congress will give substantial aid to this, the greatest enterprise of the age to our country. I am surprised at the indifference to this canal project. It seems to me that our people should manifest the deepest interest in its completion. Our farmers and manufacturers would have avenues of trade opened to them that are now virtually closed to the commerce of this country. We want freer trade with the republics of South America and the nations of Asia. The completion of the Nicaragua Canal would open up immense possibilities for the commerce of the United States. Its completion would signalize the administration of President Cleveland.

"I am prepared to believe that it would give the United States the control of the trade of the South American countries and a large share of the trade of the Orient. It will open wider markets for the products of the United States. The south Atlantic ports and the gulf ports would be vastly benefited by this increased commerce. Direct trade would be established between Southern ports and all the southern and eastern countries that would be brought into closer commercial relations with the United States. If our government has the genius and the enterprise to construct this great highway between the Atlantic and Pacific, it is no exaggeration to claim that the commerce of the world will be revolutionized in favor of the United States. There never has been such a magnificent opportunity as the building of the Nicaragua Canal would present to the people of

the United States to secure a large share of the commerce that enriches Great Britain and other nations.

"If the United States Congress has the foresight to do two things, I believe that prosperity will return to the farmer, the mechanic and the laborer, and that the capitalist and manufacturer will find new fields for investment and new markets in which to sell his wares; our labor troubles would disappear and our people would find profitable employment; our farmers would no longer be discontented with starvation prices for their products.

"1. Build the Nicaragua Canal. This will open up to the skill and enterprise of our manufacturers and merchants the entire field of commerce that has never failed to enrich the nations of Europe.

"2. Invite the republics of Mexico, Central and South America and the nations of Japan and China and India, and all the silver-using countries of the world, which embrace about two-thirds of the people of the earth, to an international monetary conference. Let this conference determine that silver will be coined at a ratio of sixteen in silver to one in gold, and that silver money will be received in exchange for merchandise and in payment of all debts. If the United States government has the foresight and the wisdom to do these things she cannot only go to the free and unlimited coinage of silver, but she can in time command the commerce of the world.

"This government should invite all the silver-using nations to an international conference to be held in Washington in the next twelve months, the object of which would be to agree upon a ratio for the international use of silver money.

"Great Britain, Germany, France, Spain, Italy and other European nations control the trade of Asia and South America. Europe buys our cotton and other raw material and sells the manufactured products. With the Nicaragua Canal and an international agreement as to the use of silver money, does it not seem reasonable that the manufacturers and merchants of the United States might command a large share of the trade of the Orient and the American continent?

"This world is none too large for the United States to command success in every field of human enterprise. The people of the North and the South should unite their energies and their patriotism in commanding a fair share of the commerce that is within their reach by the use of means that point the certain way to commercial supremacy and prosperity and national contentment and greatness.

"Nations are like men. When they rest they go into decadence and idleness. The government of the United States, by the building of the Nicaragua Canal and the calling of an international conference of the silver-using nations of the world, would give confidence to the people that there was a near future for this country full of hope and promise, when the fires of industry would be lighted all over the land, when the farmers and wage-earners would receive the just reward of honest toil, when the enterprise of our capitalists, manufacturers and merchants would cause our flag to float over ships on every sea, protecting an expanding commerce limited only by our ability to influence or direct the trade of the two hemispheres. This world is not so big after all. American genius has belted it with the telegraph and cable and lighted it with electricity. The application of steam to navigation has brought it within reach of our commercial enterprise. The building of the Nicaragua Canal will open up illimitable fields for the manufactures of cotton and iron and the varied industries of the United States.

"I agree with Senator Morgan that the opening of this highway between the Atlantic and Pacific would be the crowning glory of this nineteenth century."



**Norfolk Endorses the Nicaragua Canal**

Mr. Walter Sharp, of Norfolk, sends to the MANUFACTURERS' RECORD the following:

"At a meeting of the Business Men's Association of the city of Norfolk, Va., it was resolved unanimously—

"First. That, in the judgment of the business men of this seaport, it is the paramount duty of the United States government to guarantee the bonds of the Nicaragua Canal Co. and to push energetically to completion the greatest enterprise that now engages the attention of the world.

"Upon the securing of nature's highway between the Pacific ocean and the Atlantic depends the supremacy of American commerce and the restoration of American prosperity.

"The trade between Europe and Asia with its 800,000,000 people originally enriched Venice, Genoa and other Mediterranean ports.

"Afterwards Holland and the free cities of Germany captured the prize.

"During the present century England has derived her amazing wealth from the same source.

"The Nicaragua Canal, in bringing China, Japan, Hindostan and Oceanica 3000 miles nearer to New York, Norfolk and the Virginia coalfields than to Liverpool and London, will make our own country the vastest field for imports and exports ever known to mankind. In fact, it will tend to shift the industrial centre from the Old World to the New.

"Second. The attention of Southern senators and representatives is especially called to the patriotic duty devolved upon them by the imminence of this transcendent question."

**The Canal Should Be Vigorously Pushed.**

HOUSTON, TEXAS, July 9.

Editor Manufacturers' Record:

The importance of the Nicaragua Canal to the commerce of the South can hardly be overestimated. Not only would it open up a shorter route to the Pacific coast, but with all the eastern countries, and afford ampler markets for our products. The effect would be felt at all the gulf ports in the impetus given to shipping and trade, and especially would the staple product of the South be benefited by being brought closer to the markets of China and Japan. The cost of constructing the canal is a mere bagatelle compared with the benefits which this country would derive from the improved facilities of trade communication with the outside world. The senators and representatives from the South should be especially active in securing the accomplishment of this great work.

R. M. JOHNSTON,

Editor Post.

**The Nicaragua Canal.**

[The Richmond Dispatch.]

What, with the Chicago riots and the tariff question, and free sugar, free coal, free iron ore, etc., the Nicaragua Canal scheme was in danger of being ordered to the rear. But we are not willing—and we hope Congress is not willing—to have this great measure overlooked. Like the MANUFACTURERS' RECORD, we hold that no other commercial enterprise which has ever been put through anywhere in the world has benefited the world so much as it will be benefited by this canal. We quote the MANUFACTURERS' RECORD:

"As great as will be its effect upon the entire country, and as vast as will be the wealth created by its construction, the South especially will reap greater benefits than anyone would dare attempt to portray. It would centre at the south Atlantic ports and in the Gulf of Mexico a foreign commerce vaster than we can now appreciate. It would open markets for coal and iron and cotton that would give increased value to every acre of coal

and iron property in the South and prosperity to all the agricultural interests of this section.

"Whatever may be the result of the work of the present Congress, however, much business may be restricted by unnecessary delay in the tariff fight, and whether wise or unwise be the final decision, the good work of this Congress will counterbalance its bad if it puts into effect the laws which will make it possible to begin the immediate and active construction of this canal."

This may seem to be extravagant talk, but it is not. Nor was Senator Morgan extravagant when he styled the Nicaragua Canal the crowning glory of this wonderful nineteenth century.

It is strange to us that any Southern should oppose the extension of aid to this grand scheme by the grandest nation in the world. We quote the MANUFACTURERS' RECORD again:

"No other enterprise, not even the vast colonization schemes by which Great Britain expects to open up to the civilized world the Dark Continent, begins to measure in influence upon the destiny of the human race and upon the world's trade the opening of a highway between the Atlantic and the Pacific.

"It is difficult to adequately portray, without being accused of the wildest enthusiasm, the marvelous change that must inevitably follow the construction of this canal. Its construction must revolutionize the carrying trade of the world; it will unite in closer development the Atlantic and the Pacific coasts of our country, and vastly stimulate interior development; it will give to our country more of the vast commerce of the East—a commerce that has enriched every nation that has ever controlled it; it will open wider markets for the products of our factories and farms; it will create throughout the entire country a growth far surpassing in magnitude the wonderful change wrought by the construction of the first railroads across the continent from the Atlantic to the Pacific."

**THE WEEK IN THE SOUTH.**

Condition of Business and the Latest Features of Southern Progress Summarized.

Reports from the South confirm the tendency towards improvement indicated by the bank clearings, but the tariff delays help to retard all business movements, and especially to delay the full organization of many contemplated industrial enterprises. The list of new enterprises reported for the week is smaller than for some weeks. Among the leading concerns reported are a \$25,000 shirt and collar factory, \$5000 shirt factory, phosphate plant, publishing company, mattress company, cannery, coal mine, electric plant, etc., in Tennessee; a \$25,000 coal-mining company, zinc mines and pyrites mines in Virginia; a \$50,000 electric-light plant, \$2,000,000 water-power company, \$100,000 transfer company and \$100,000 publishing company in West Virginia; a \$10,000 cannery, \$15,000 lumber company and ice plant in Florida; a \$25,000 ice-plant company, \$15,000 soap factory, \$60,000 drug company in Georgia; large lumber mills, stove plants, marble works, in Alabama; water-works, telephone system, quarries, in Kentucky; water-works, electric plant and \$35,000 mercantile company in Louisiana; \$100,000 ice-manufacturing company, \$25,000 commercial company, telephone system, in Maryland; coal mines, ice plant, oil mill, electric plant, lumber mills, gold mines, in North Carolina; gold mines in South Carolina; a \$10,000 manufacturing company in Texas. Among the important new buildings is a \$6500 school in Texas, \$6000 hall in Tennessee, \$50,000 public building in Kentucky, \$400,000 public building in New Orleans and many others.

**FOR SOUTHERN ADVANCEMENT.**

Organization of the Southern Exchange Association as the Outcome of the Fifth Avenue Hotel Meeting, June 21.

An Invasion of the North in Behalf of the South.

The meeting composed of business men, North and South, held at the Fifth Avenue Hotel, June 21, appointed a permanent committee to be "charged with the duty of perfecting an organization of business men of the North interested in Southern development, and of Southern business men, to provide the ways and means for ascertaining, advertising and in all ways advancing the development of the whole South." This committee was composed of one member from each Southern State (Missouri included), twelve members at large from the North and West, and the chairman ex-officio, with power to increase their number. This committee met on July 12 and 13 and spent two full days until late in the evening discussing the many plans and suggestions that had been received from all parts of the South. The most careful study was given to every suggestion, and, as the outcome, a comprehensive plan was adopted, embodying many features gathered from the various plans submitted. In order that the full scope of what is proposed may be clearly understood it may be well to give the complete articles of association:

ARTICLES OF ASSOCIATION OF THE SOUTHERN EXCHANGE ASSOCIATION.

**ARTICLE I.**

We, the committee on permanent organization appointed by the Meeting of Northern and Southern Business Men, held at the Fifth Avenue Hotel, New York, the twenty-first day of June, 1894, charged with the duty of perfecting an organization of business men of the North interested in Southern development, and of Southern business men, to provide the ways and means for ascertaining, advertising and in all ways advancing the development of the whole South, do now and hereby, in virtue of the above power and in pursuance of said instructions, establish, organize and constitute the "Southern Exchange Association."

**ARTICLE II.**

Section 1. The purpose of said association shall be to stimulate the progress of that portion of the United States of America known as the Southern States—

First. By encouraging a more frequent personal intercourse between the citizens thereof and those of other portions of this country and of foreign countries when found desirable.

Second. By collecting accurate and detailed information respecting the natural resources and the commercial, industrial and social conditions of every locality in the South.

Third. By disseminating this information in a systematic and businesslike manner wherever it may be most beneficial to the localities or industries involved.

Fourth. By ascertaining the wants of capital seeking investment and of prospective settlers on the one hand, and of the individuals and communities seeking capital and increased population on the other, and by finding a common point of action for both.

Fifth. By procuring the passage of laws in the Southern States which will secure prompt adjudications and encourage the influx of capital and population as may be required.

Sixth. By uniting in proper co-operative business combination the several interests in the South which will be benefited thereby, affording a reliable and prompt medium of communication between parties, whether corporate or individual.

Seventh. And generally to aid by advice, information and active co-operation in the

development of the Southern States through an enlarged distribution of the wealth and population of this country.

Sec. 2. It is declared to be a cardinal principle of the association that it is not its province to interfere or compete with the business of local investment, real estate or other corporations, bureaus, firms or individuals engaged in the work of Southern development, but that it will co-operate with and advance the interests of all found worthy of its endorsement and assistance.

Sec. 3. It is declared to be a cardinal principle of this association that it desires the South to be peopled with citizens of the United States, and only the best classes of substantial settlers of desirable nationalities proposing to become citizens of the United States.

**ARTICLE III.  
Membership.**

Section 1. The members of such association shall consist of the members of the committee on permanent organization, which was appointed by the meeting held on the twenty-first day of June, 1894, at the Fifth Avenue Hotel, in the city of New York, styled "Meeting of Northern and Southern Business Men," and those whom they may add to their number, and their successors, who may accept said appointment, to wit: One member from each of the fifteen Southern States, as the representative of his State, and one from the District of Columbia, as its representative, with twelve from the country at large, and such additional members at large as have been, or may be, elected under the powers conferred by the meeting aforesaid.

Sec. 2. There shall be associate members of said association, who shall consist of all who shall register their names and addresses at the office of the association, or at any of its branches, and shall be approved by an officer or member of the association, and shall pay to the association, annually, the sum of \$5.00.

Sec. 3. The associate members shall have the right to consult the registry of information, kept at the offices of the association, and to receive all publications and reports issued by said association.

Sec. 4. The association may for good cause terminate, by a vote of two-thirds of those present, the membership of any member or associate member.

**ARTICLE IV.  
Officers.**

Section 1. There shall be a president, vice-president, secretary, treasurer and general manager, who shall be elected by the association for such term of service as may be prescribed at the time of such election, and with such salaries or compensation as shall be hereafter determined.

Sec. 2. Two or more officers may be united in one person.

Sec. 3. President.—It shall be the duty of the president to have general control of the affairs of the association, to preside at its meetings, countersign, as hereinafter provided for, all checks for the payment of money, and have general supervision of the business of the association.

Sec. 4. Vice-President.—The vice-president shall discharge the duties of the president in the absence of the latter.

Sec. 5. Secretary.—The secretary shall have the custody of the minute books, records and business papers, and official correspondence of the association.

Sec. 6. Treasurer.—The treasurer shall have charge of all the moneys of the association, and the same shall be deposited in a financial depository, to be selected by the executive committee. All checks for the payment of money shall be signed by the treasurer, or, in his absence or inability to act, by the secretary, and countersigned by the president, or vice-president acting in his stead. The treasurer shall keep proper books of account, and vouchers for all receipts and disbursements, and render proper account of the same to the executive com-



mittee, and to the association, at every meeting.

Sec. 7. General Manager.—The general manager shall have full charge of the business details of the association, and shall give all necessary time and attention to the same, under such regulations as the association shall prescribe.

Sec. 8. Executive Committee.—The association shall elect from its members an executive committee to consist of nine members, four of whom shall constitute a quorum, which shall be vested with the powers of the association during the intervals between the meetings. Regular meetings of the executive committee shall be held Tuesday of each week, at 11 A. M., and special meetings may be called by the chairman, or any two members of the committee, on three days' notice, issued by letter or telegraph. The president of the association shall be, ex-officio, a member and chairman of the committee.

Sec. 9. Advisory Boards.—There shall be an advisory board, or branch of the association, in each Southern State, of which the member of the association for that State shall be chairman; and in addition to said chairman, said advisory board shall consist of at least one representative from each congressional district in said State. The advisory board for each State, a majority of which shall constitute a quorum, shall be selected by the chairman aforesaid, who shall report their names to the office of the association. The duties of said advisory boards shall be: To assist the association in obtaining and verifying detailed information respecting the resources and wants of each State; to procure the correction, through legislation, or by the exercise of proper influence, of whatever there may be in local business methods, or laws, which tends to discourage settlers and investors; to inform themselves upon all subjects of importance to their respective States and local districts touching the work of this association; to receive all business and other suggestions from local authorities, corporate and otherwise, and from citizens, and report the same, with their judgment thereon, to the association; to give their views of any action or omission of the association affecting their localities, injuriously or otherwise; and generally to co-operate with the association in all things. The records of the appointments and of the proceedings of said advisory boards shall be reported from time to time and shall be filed at the office of the association in New York. This provision shall likewise apply to the District of Columbia, in which shall be established a similar advisory board, or branch of the association, the members whereof shall be appointed by the member of the association from the District of Columbia.

Sec. 10. Special Committees.—The association shall select from its members, or from others, proper committees for the division of the labors of the association. The said committees may be respectively styled bureau of agriculture, bureau of manufacturing and mining, bureau of timber and timber lands, bureau of water-powers, bureau of transportation, bureau of health and climate statistics, bureau of advertising and publications, bureau of legislation, bureau of settlers, bureau of foreign and domestic commerce, bureau of permanent exhibits (in the city of New York), with such other regular and special committees as may be deemed expedient. The said committees shall each consist of such number, and be charged with such duties and responsibilities, as the association may prescribe; but the association may, at its discretion, unite these committees or bureaus, or any one or more of them, or discharge their duties without their intervention.

Sec. 11. Collection and Distribution of Information.—The association shall pro-

vide, by contract or otherwise, through a proper agent experienced in such work, for the collection and classification of the detailed information necessary for true presentation of the resources and wants of every locality in the South; and shall further provide, by contract or otherwise, through a proper expert agent skilled in such work, for the presentation and dissemination of such information in the proper localities, manner and time.

#### ARTICLE V. Meetings.

Section 1. The regular meetings of the association shall be held the second Mondays of January, March, May, July, September and November of each year, in the city of New York.

Sec. 2. Special meetings may be held upon the call of the president, or by him at the request of nine members, after due notice in writing, or by telegraph, issued ten days before the date of the meeting. The presence of nine members of the association shall be necessary for the transaction of business.

Sec. 3. The annual meeting shall be held the third Wednesday of June.

Sec. 4. All meetings shall be held in the city of New York, unless otherwise directed by the executive committee.

#### ARTICLE VI. Finance.

Section 1. Revenues.—The revenues of this association shall be derived from voluntary subscriptions, from membership dues, from registration fees and from such other sources as may be in consonance with the purposes of said association.

Sec. 2. A proper registration fee shall be paid by all corporations, firms and individuals desiring to make use of this association as a means of communication, by indorsement or otherwise, with those whose business and co-operation they seek. Said registration fee shall in no case be less than \$1.00 nor more than \$100, and, in addition thereto, the expenses attending a proper investigation of the subject, if the latter shall be found necessary.

Sec. 3. The revenues of this association shall be appropriated to its maintenance; and not for the profit of its members, and its expenses will be measured solely by the requirements which grow out of securing the highest ability and experience and the most efficient service wherewith to execute its purposes.

Sec. 4. No financial obligations shall be incurred for the association by any officer, agent or employe thereof without express authority.

Sec. 5. No financial obligation shall be incurred or authorized by the association unless the money is in hand to discharge the same.

#### ARTICLE VII. Offices.

The principal place of business of the association shall be in the city of New York, State of New York, and agencies and additional offices may be established elsewhere in this country and in foreign countries.

#### ARTICLE VIII. Amendment.

These articles of association may be changed or amended by a vote of two-thirds of the members present at a meeting called for the purpose, of which the notice herein required shall have been given, together with a copy of the proposed change or amendment.

The list of officers and members and executive committee is as follows:

#### OFFICERS AND MEMBERS OF THE SOUTHERN EXCHANGE ASSOCIATION.

##### MEMBERS.

Alabama (Birmingham)—H. M. Caldwell.  
Arkansas (Washington, D. C.)—Clifton R. Breckinridge.  
Florida (Sanford)—D. H. Elliott.  
Georgia (Augusta)—D. B. Dyer.  
Kentucky (Lexington)—R. H. Courtney.  
Louisiana (New Orleans)—Harry Allen.

Maryland (Baltimore)—R. H. Edmonds.  
Mississippi (Greenville)—William G. Yerger.  
Missouri (St. Louis)—Jerome Hill.  
North Carolina (Durham)—Julian S. Carr.  
South Carolina (Columbia)—Alexander C. Haskell.

Tennessee (Memphis)—I. F. Peters.  
Texas (Galveston)—Walter Gresham.  
Virginia (Richmond)—John Skelton Williams.  
West Virginia (Fairmont)—A. B. Fleming.  
District of Columbia (Washington)—Boyd Smith.

##### At Large.

Johnathan A. Lane, Boston, Mass.  
Aretas Blood, Manchester, N. H.  
Russell A. Alger, Detroit, Mich.  
Theodore Frelinghuysen, New Jersey.  
J. Willcox Brown, Baltimore, Md.  
Thomas K. Worthington, Baltimore, Md.  
Clinton Furbish, Washington, D. C.  
Hamilton Disston, Philadelphia, Pa.  
Clarence Clarke, Philadelphia, Pa.  
William McAdoo, Assistant Secretary of the Navy, Washington, D. C.

Thomas P. Grasty, Versailles, Ky.  
Abram S. Hewitt, New York city.  
Stuyvesant Fish, New York city.  
James Swann, New York city.  
Samuel M. Jarvis, New York city.  
Chauncey M. Depew, New York city.  
William R. Grace, New York city.  
Walter Stanton, New York city.  
Henry M. Flagler, New York city.  
Henry B. Plant, New York city.  
John H. Inman, New York city.  
Hugh R. Garden, New York city.  
Charles A. Deshon, New York city.  
William G. Maxwell, New York city.  
R. Wayne Wilson, New York city.  
Atwood Violet, New York city.  
George A. Sullivan, New York city.

##### OFFICERS.

President, Hugh R. Garden.  
Vice-president, Stuyvesant Fish.  
Secretary, R. Wayne Wilson.  
Treasurer, John H. Inman.  
General manager, R. Wayne Wilson.  
Note.—Temporarily the offices of secretary and general manager are united in one person.

##### EXECUTIVE COMMITTEE.

Hamilton Disston, Pennsylvania.  
Samuel M. Jarvis, New York.  
George H. Sullivan, New York.  
John H. Inman, New York.  
R. H. Courtney, Kentucky.  
H. M. Caldwell, Alabama.  
Harry Allen, Louisiana.  
Alex. C. Haskell, South Carolina.  
John Skelton Williams, Virginia.  
Hugh R. Garden, ex-officio, chairman.

The power for good, if wisely managed, which such an organization can be made can scarcely be measured, and the character of the men chosen to guide its affairs is, it seems to us, a guarantee to the South that this association will become one of the greatest factors in its advancement. Those who attended the meeting on June 21 and had the pleasure of listening to the strong speech in favor of the South by Mr. Stuyvesant Fish will be glad to know that this association is to have his hearty co-operation as its vice-president. As vice-president of the Park National Bank, probably the greatest creditor bank of the South in the Union, closely identified with the foremost financiers of America, and deeply interested in the South, Mr. Fish is in a position to do great good for the association and the South. Hamilton Disston, the greatest saw manufacturer in the world, long since demonstrated his faith in the South by investing several millions there. Samuel M. Jarvis, whose firm has put over \$30,000,000 of English money in this country since 1886, much of it in the South, is one of the most active workers in the association. George H. Sullivan is a member of the great law firm of Sullivan & Cromwell, widely known South as well as North as among the leaders in financial and legal matters in New York. The other officers and members of the executive committee are Southern men well known personally throughout the South.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

## SOUTHERN APPALACHIAN REGION.

### A Rare Combination of Advantages.

### A Country of Infinite Wealth-Creating Possibilities.

By H. B. Wetzel, Knoxville, Tenn.

[FOR MANUFACTURERS' RECORD.]

Events are being shaped which will form an epoch in the Southern States in the near future. Various elements of late have been at work, and are now at work, which are creating conditions that will bring about this result. Influences are tending to bring forth changes in the material, social and political aspects of the South that are so significant as not to be mistaken in their meaning. I need not discuss these, for I believe that the epoch is a foregone conclusion. Assuming this, I wish to direct special attention to a section of the Southern States which must come in for a very large share of the coming changed conditions, and to enjoy the prosperity which awaits it. I refer to the southern Appalachian region, a section with which I am somewhat personally familiar.

May I be pardoned for that which may be of a personal nature in relating some things of which I have seen in the interesting region of which I shall describe. A native of Pennsylvania, but for many years previous to my coming South I was extensively engaged in the lumber business in Michigan. Nearly ten years ago I came to Knoxville, and since then it has been my adopted home. My work has been that of investigating the natural resources of the southern Appalachian region from West Virginia to Alabama. In doing this I have traveled many thousands of miles on foot and horseback in the very wildest and remotest districts, as well as along the main traveled roads. What I have seen has made a deep impression upon me, and if I can say something that would settle doubts with some and to tell others who are waiting to know more about this highly favored region, I will have fulfilled only my duty to others.

#### THE PEOPLE.

Erroneous impressions prevail in many parts of the North, as well as the South, as to the people of this region.

Many descriptions have been given which are mere caricatures and of most exaggerated form. Especially is this true of those who have made hasty trips through the country with no other purpose than to see and describe the quaint and peculiar sides of the people, rather than to remain long enough to see and study the inner and better sides of the life of this people.

Many are laboring under the delusion that the characters represented by Miss Murfree, in her sketches and stories of mountain life, are but types of the people of the whole mountain region from the Potomac river to the foothills of Alabama. It is not my purpose to enter into a controversy with that brilliant author, who has done more than all others to call attention of the world to the quaint people who inhabit the more remote mountain districts of Tennessee and North Carolina. I know the localities and people well which she describes in her masterly way.

I have had business relations with these people for years. Miss Murfree may surround her characters with an atmosphere of absorbing interest, but it is with the pen of a novelist, and many of her characters I believe to be children of the brain.

I have been with this people for months and years, and as a business man know their real or practical life. I do not deny that they are peculiar in some respects, or may appear so to strangers. So do most Europeans appear to Americans, and the reverse. Our views of the peculiarities of people are the result of preconceived no-



tions. A touch of cosmopolitan life does away with this.

While these mountaineers live a rather primitive life, and I would prefer to see them surrounded more by the influences of civilization, yet in many respects their simple life might well be imitated by others.

Never have I met with such genuine unostentatious hospitality as with the real mountaineer. The latch-string of the rudest log cabin, as well as the more pretentious dwelling, is always out, and you are welcome spontaneously and in a modest way that puts one at ease at once.

The fattest pullet is killed to satisfy a keen appetite, and the best feather bed is placed at your disposal that you may take needed rest. They will put themselves to inconvenience for the comfort of a stranger who has no earthly claim upon them.

In nearly a journey I have appeared at these mountaineers' homes at all times of the day and night, alone or with others, and it was always with words of welcome. Only once do I remember to have been refused entertainment, and in that instance it was where a man and wife occupied a large frame house, and the only occupants, who tried to find so many objections that I did not insist upon staying with them over night, notwithstanding it was nearly dark and I had a dangerous river to ford a mile beyond and several hours, horseback ride before I could reach a place of shelter. The river was greatly swollen from rain, which was then pouring down, but I plunged in the rapid current and was soon carried down, horse and rider, and lodged against a big rock in the middle of the stream. By this time we were in Egyptian darkness, but I managed to control my horse, which swam to the further shore, and after an hour's groping found a trail which led me to a log cabin, where I appeared about midnight. Upon calling, the owner of the cabin appeared, bade me come in, and while he took care of my horse his wife built a cheerful fire in the fireplace and soon prepared an appetizing meal for me. When I inquired about the man across the river who objected to the entertainment of a stranger, I was informed that he had been out in the world a little, had been in college one term, and had learned just enough to make a fool of himself.

I mention this incident because it is of such rare occurrence that it is well to let the world know of it.

Such a thing as theft amongst the mountain people also is rarely heard of, and robbery almost unknown.

I have paid out large amounts of money to the mountain people for timber and mineral properties. Traveling alone along the highways and byways, stopping with strangers and friends who knew of my business, and having money and other valuables with me, yet I never made any attempt to conceal them or locked a door, nor carried any other weapon save a small pocket knife, and never had use for any other weapon.

This people are illiterate and have strong likes and dislikes. If you treat them well they will stand by you to the end; if you will commit an act to forfeit their confidence you will not always find it smooth sailing. There are factions and family feuds in some localities, but these are gradually dying out. It is no part of the stranger's affairs to meddle with them in their family affairs, but if the stranger will take part he can expect to take the consequences. So long as he attends to his own business he will have no trouble, but if he seeks trouble he can have all he wants.

Much more might be said of the characteristics of the mountaineers, but must be omitted that I may pass along to other things.

It must not be understood that the whole of the southern Appalachian region is inhabited by mountaineers, or by the class of

people of which I have given brief description. There are numerous towns and villages and thickly-populated farming communities where the people enjoy the benefits of civilizing influences such as may be found elsewhere. Schools and churches abound. Sunday observance is a religious duty which is carried out to a greater degree than anywhere that I have ever seen. This may be understood when it is known that the larger part of the population are the descendants of Scotch-Irish element, who were the pioneers of this region. Very little recent foreign element is represented, and that which is here is of the better class and readily assimilates with the native element.

During the last ten years large accessions to the population have been made by people from the New England, Middle and Northwestern States. It is the mingling of this element with the native that is bringing about changed conditions socially, politically, religiously, industrially, financially and commercially. The hustle and never-ceasing push of the Northwestern man is neutralized by the efforts of the more studious and careful methods of the New Englander and Middle States man and by the slow and conservative methods of the native. At the same time the native is imbibing new methods and catching the spirit of progress, which is taking him out of the old ruts in which he traveled for so many years. This has been shown to a marked degree during the past five years in city, town, village and country.

Improvements in streets, sewers, public lighting, telephone service, electric street railway systems, public buildings, better schools and school buildings, better hotels, more banks and more capital and other things of a public-spirited nature characterize the progress of every city and town throughout the whole region during the past five years. In the country we begin to see better roads and more interest taken in good roads than was ever known before. Handsome brick and frame dwellings are replacing old log houses, and good barns supplant the rude pole affair that was a libel to be called a barn. Fences that were rows of brush heaps are being trimmed or rooted out and replaced by wire or posts and boards, often whitewashed or painted, which is in striking contrast to the old order of things. A spirit of change has overspread the whole region. Never has there been a time when newcomers would be welcomed more gladly, and the conditions so favorable for others to make this their new home.

#### CLIMATE.

One of the most important things for one to consider when they think of changing their place of residence to that of a new one is healthful conditions. Climate has much to do with these conditions. I do not believe that it has been seriously disputed that this region is one of the most healthful in the United States. The climate reminds me much of central and northern France. When I thought seriously of changing from the rigorous climate of Michigan to the "sunny South" I did not want to make a radical change, and thought that it would be best to select the elevated region of the central South on account of sanitary and business considerations. I have not regretted the selection which I made.

Free from miasmatic influences, with pure air, plenty of rainfall—but not superabundance—an absence of extreme temperature, mild winters, early spring and prolonged autumn, the latter sometimes for a period of six weeks or two months surrounded by the delightful halo of Indian summer, I do not know of any climate, take it throughout the year, that is more desirable. Violent storms are infrequent, and what are known elsewhere as cyclones and tornadoes are almost unknown here. The mountains break the force of the

storms that frequent the Western plains, region in their eastward course, and those following the gulf and south Atlantic seaboard seldom reach the mountains to do serious damage.

#### SCENERY.

Nowhere on this continent east of the Rocky mountain system is there such magnificent scenery or so much of varied and interesting character as in the southern Appalachian region.

The lofty Unaka and Black mountains, the culmination of that gigantic effort which raised the eastern part of our continent from out the depths of a warm sea in the far distant past, and now rears in towering and massive forms more than a mile into the "ethereal blue," impress one with imposing grandeur. Mt. Mitchell overshadows all, but there are scores of peaks whose scarcely lessened height lends massive grandeur which is truly imposing and sublime.

One may start on a journey at White Top mountain, in southwest Virginia, the source of the Tennessee and New rivers, and follow southwesterly along the Unaka range where Roan, Big Bald, Bull's Head, Clingman's Dome, Thunder Head and other peaks pierce the sky, or to the southward, where looms that patriarch Grandfather looking down upon his family, the Pinnacle, Table Rock, Short Off, Hawksbill and younger members of a numerous family, and beyond nearly fifty miles to the southwest, the Black mountains, a short cross range twenty miles in length having a score of peaks more than 6000 feet high, of which Mt. Mitchell leads; then on to Caesar's Head, Pisgah, Whiteside, Saluda and beyond into northern Georgia, range after range and peak after peak, and the whole appearing as one vast panorama far as the vision can reach, and likened unto a sea of mighty turbulence, a scene of impressive grandeur. And throughout that whole region there are almost countless turbulent brooks, waterfalls and chasms, and beyond merging into quiet, peaceful streams, and the landscape widening into beautiful coves and valleys, and where all nature is at rest.

The average tourist in passing along the main traveled routes catches but a glimpse of that which lies beyond. At Round Knob, N. C., just east of Asheville, or along the upper French Broad river, and along the narrow-gauge railway from Johnson City, Tenn., to Cranberry, and thence by stage to the upper Linville river region about Grandfather mountain and Blowing Rock, one gains something of that feast of scenic beauty which lies in that grand old mountain region. For days, weeks, months and years, much of the time alone, I have traveled in that inspiring region of solitude and grandeur, where one's thoughts are lifted above the narrow, sordid things of this life and into the higher realms of the Great Architect.

Not far in the future, when the heart of this now wild region will be made accessible by better means of transportation, it will become to the people of the South what the Catskills and Adirondacks are to the people of the Eastern States as a pleasure resort, and it will draw people from all parts of the country.

#### NATURAL RESOURCES.

Volumes might be written of the marvelous natural wealth of this region which but awaits intelligent effort to convert it into interchangeable values. During the "boom" period a few years ago many glowing and meaningless descriptions and exaggerated statements were made concerning it, mostly for purposes foreign to that for its healthful and proper development. Many eager persons grasped at what they believed to be a prize, but caught instead a bubble. Yet the experiences of those unfortunate ones cannot hide the fact that there were prizes gained by others which they yet retain; and I do not hesitate to state that I believe

that there are infinitely greater prizes yet in store for the intelligent and active seeker than have as yet been secured.

Future enterprises will be characterized by a more careful investigation and scrutiny of the basis upon which the enterprise is founded, and able, practical men will have management of affairs.

#### TIMBER.

Of the immense resources, there is one unmistakable, visible source of wealth—her timber supply. Whatever the underground wealth may be, the timber is here and may be seen by anyone who wishes to see it. Here are the most extensive hardwood forests on the North American continent. It is no small area, for the aggregate acreage comprises a territory not much less than the whole of Great Britain.

No section of our continent has a greater variety of timbers and woods, and nowhere do they reach a higher order of development. Most of the timber is in its primeval state. The Blue Ridge, Great Smoky and Cumberland mountains and subordinate ranges are clothed to their summits with valuable timber. The lumberman's axe has made but slight inroads into these grand forests. It is well that they have been remote from railway lines, for they have been saved for future generations, and will be one of the potent factors that will swell the enormous industrial wealth of this region during the coming epoch.

#### COAL.

West Virginia, Virginia, Kentucky, Tennessee and Alabama have vast coalfields of inestimable value. Developments during recent years demonstrate the extent and value of this mineral beyond a question of doubt, and the mining industry is but in its infant state as compared to that which it will be in the near future. The possibilities of its development and expansion are beyond the comprehension of those who view it in the light of present conditions. But new industrial and commercial conditions will arise, and interstate and international relations will become so intimate as to demand an enormous output from our coal mines in addition to that which will be absorbed for domestic use.

#### IRON.

Bands of iron ore bind, as it were, the massive ranges that stretch across this region, while in the hills and valleys there are detached bodies and deposits, often of considerable extent and easily accessible. The quality of most of this ore that has been worked is not so high in metallic iron as that of the Lake Superior region and Cuban ores, but there are well-known deposits of great extent that have as yet not been worked in a commercial way that will add greatly to the reputation of our Southern iron ores when the proper time comes to demand their use. But if nature has withheld the richness in metallic iron, she has offset this by way of compensation in fluxing elements in the ore itself, and in the economic features of cheap mining and juxtaposition to the vast coal beds nearby, where the cost of smelting iron ores will be brought to the minimum.

#### MINOR MINERALS.

The coal and iron of this region appear to have overshadowed all other minerals. But if attention has not been so generally directed toward them, it does not change the fact that other and minor minerals exist, to use a miner's phrase, "in paying quantities." The knowledge which we already have of the gold district along the southeastern slope of the Blue Ridge, and in the Piedmont region from Alabama to Virginia, justifies the belief that before many years it will be one of the most active gold-mining districts in the United States. I have seen ample evidence to lead to this conclusion. I have panned gold or seen it panned in nearly every stream which has its source in the Blue Ridge and flows toward the Atlantic from



Virginia to Alabama. I have seen but little evidence of valuable silver deposits. But of copper it may be found in numerous places, and indications would lead one to believe that it exists in such quantities that the mining of this mineral will be carried on to considerable extent in the future.

Lead exists to some extent, and zinc of excellent quality is being mined profitably, but as yet there has been barely a hole scratched in the ground where it is known to exist in quantity.

Manganese is found in numerous places in the valleys and foothills. Corundum, mica, talc, kaolin and gypsum have been profitably mined for years. Chromium, nickel and the rarer minerals are known to exist, but developments have not been sufficient to demonstrate their extent. Of marble it is here "world without end." Knoxville is the seat of the marble industry, and there is enough of this excellent material within a radius of fifty miles of the "Marble City" to supply the world for years.

#### SOIL.

There is much variety in the soil, as one would be led to infer from a knowledge of the geological character of the region. In many of the valleys limestone predominates and clay soil results. Slate, shale, gravel and chert characterize many of the subordinate ridges. The soil of the Cumberland mountains, especially that of the plateau region, where erosion has carried off the upper stratum, is of a sandy nature. The Blue Ridge and Great Smoky mountain region, being of the older geological formation, through its decomposition and that of the decayed vegetable matter, has produced soil of great fertility. This may be seen in the immense growth of timber and of grain and grasses where the land has been cleared in the rich mountain coves. I know that a very large portion of that section is well adapted to the growth of all the grains and grasses which thrive in the temperate latitude of our country. In places the soil is exceedingly rich, black and loamy and highly productive. Often while in the woods I have pushed a walking stick with ease down to a depth of one to two feet into the soil. The giant trees denote the productiveness of the soil.

#### WATER.

I do not know of any section of our country more highly favored with water than this region. Springs abound everywhere. In most of the valleys west of the summit of the Blue Ridge, when the level of the limestone stratum is reached, springs gush forth from the limestone rock everywhere. Nearly every farmer has a good, strong spring from which he gets water for family use, but innumerable small springs are found in field and forest, and which form the great number of watercourses throughout the country.

On the higher elevations "freestone" or soft water, clear as crystal, almost icy cold and pure as ever burst forth from the earth, characterizes the whole mountain region. The recollection of many such springs in the remote forest districts where I quenched my thirst are as an oasis in my memory.

#### AGRICULTURAL POSSIBILITIES.

Through a bad system of farming since the early settlement of this region some of the land has become unproductive without labor and expense to bring it up toward its primitive state of production. Forests were cleared of their timber and lands put under cultivation which continued from year to year, and often without the rest and change needed by the method of crop-rotation, and never any fertilization added to replace the elements lost through the growth of crops. Thus they became worn out, and other lands stripped of its timber to go through the same course of treatment. Some of this worn-out land is badly washed with deep gullies, or soil entirely washed away down to the upper rock stratum. Other worn-out lands are covered with

dense growth of young timber, which is adding to the value of the lands from year to year. Where intelligent effort has been made to restore these worn-out lands that are not beyond restoration, it has been accompanied with gratifying results. They respond with amazing readiness to the influences of stable manure, mineral phosphates, lime, clover, cow-peas and other fertilizers. Most of the soil throughout the region is of loose, mouldy character, dry or well drained, and very little hard pan is found, while tile draining is almost unknown. A favorable feature to the farmer is the mild weather during winter, when seldom a week throughout the winter season is the ground frozen so hard but what he can plow or prepare his land for the spring crops, thus avoiding the hurry of doing spring work, as is necessary in more northern latitudes. Fences can be repaired and other work required about the farm can be done with comfort.

#### STOCK-RAISING AND DAIRYING.

Those who are thoroughly familiar with this region from personal observation cannot escape the inevitable conclusions that it is destined to become the stock-raising and dairying region of the South. Nature has been marvelously generous in supplying the requisites towards that end.

Soil, climate, water, native grasses and variety of soil and natural conditions to produce cultivated grasses and grains for supplying the needs of live stock, perhaps, has no equal on this continent.

Our mild winters, in which stock runs out in the fields or woods most of the year, and with some owners at all times, absence of drouth, blizzards, tornadoes and other hazardous elements are features which will enforce themselves upon the attention of the stock-grower.

Tens of thousands of head of stock grow fat enough for the butcher while grazing in the mountains on wild pasturage during the months of April, May and June, where they remain until October or November, when they are brought into the settlements to remain during the winter or sold to stock-buyers who ship to distant markets.

Dairying for the market is an infant industry, but growing rapidly. It is an industry which must be understood in order that the best results be gained, and therefore an increased interest is manifested to learn more about it through discussion at farmers' conventions, agricultural papers and members engaged in the industry in every community.

With such an abundance of clear, pure, cold spring water abounding, that almost every farmer has a spring and springhouse to keep milk and butter at proper temperature, and suitable grass and fodder for milk cows, the requisites for butter and cheese-making are at hand.

I do not hesitate to hazard the prophecy that the southern Appalachian region in the coming years will largely supply the region lying between it eastward, south-eastward, southward and southwestward to the Atlantic and Gulf of Mexico with the larger portions of their dairy supplies, as well as beef and mutton supplies.

And not only will this be done, but the amount consumed within her own territory, when her forests and mines will be drawn upon by the vast industrial army which will invade the territory, will assume proportions of which we can as yet scarcely conceive.

#### FRUIT-GROWING.

Taking it as a whole, it is not a first-rate fruit region, on account of the uncertainty of a sure crop every year. Two or three seasons may bring abundant yield, to be followed by one of almost entire failure. Throughout most of the entire region the fruit crop has been a failure this season. The cause was an exceptional mild winter, during which the buds and blossoms pushed forward prematurely, to be caught by frosts and freezing weather in April which killed

the fruit. But ordinarily there is a fair yield, and if some kinds of fruit are killed, others withstand the cold. By selecting sheltered coves or the proper exposure on hillsides one may depend upon fruit with a considerable degree of certainty every year.

Apples, peaches, pears, plums, grapes, berries, all reach a high order of development. The higher the elevation the more perfect in size, form, color and flavor is reached in the fruit when requisite natural conditions surround it. I never saw finer fruit, nor of a more delicate flavor, than that which I have eaten in the high, mountainous region of western North Carolina, at altitudes ranging from 4000 to 5000 feet above sea-level. Neither the peaches of California, Michigan, Delaware or Maryland, nor the apples of Canada, New York and Michigan, excelled them in size, color or delicacy of flavor. The altitude and humidity of the atmosphere, together with the lessened season of growth as compared with the fruit of lower levels and other features which enter into fruit growth, has, no doubt, much to do in bringing this fruit of the greater elevations to such a high state of perfection.

I have sketched in outline only some of the distinctive features of a highly-interesting region. The space allotted for my task would not permit me to dwell upon matters of detail. But enough has been said, I trust, to indicate the vast possibilities for future development, and the wealth for the millions of active workers who will people this favored region during the epoch which will soon begin to dawn upon us.

## MEN AND MONEY MOVING

### Southward Is the General Trend.

An Interview with Mr. M. V. Richards, of the B. & O. R. R.

A few years ago the Baltimore & Ohio Railroad, breaking away from the conservative policy that had for years prevented its giving any attention to local development and immigration matters, decided to establish a land and immigration department. The management of this department was given to Mr. M. V. Richards, who had had long experience in Western immigration matters, and the success which has attended his work has demonstrated what Southern railroads can do in attracting attention to the country along their lines.

For the last few years Mr. Richards, with untiring energy and with an eye ever open to see opportunities for commanding public attention, has been vigorously at work covering the North and West by visits, as well as by correspondence, not confining his attention simply to securing settlers, but seeking to likewise draw capital and manufacturing enterprises.

For the first few years it was something of an uphill work. Those who watched the efforts of Mr. Richards and who knew the conditions that surrounded immigration work in behalf of the South could realize something of the disadvantages, but, persistently keeping at it, he gradually commenced to see the good results. At the present time the outlook indicates a most remarkable turn of the tide from the West and Northwest to the country along the Baltimore & Ohio Railroad.

In an interview with the MANUFACTURERS' RECORD Mr. Richards states that he has just returned from the Northwest, and is gratified to see the increasing interest that is being awakened throughout all that country in the South. His department is now receiving on an average 250 letters a day from Northern and Western people asking for information about Maryland, Virginia and West Virginia, the three Southern States through which his line passes.

What the Baltimore & Ohio Railroad has accomplished can be done by other Southern roads. Mr. Richards was a pioneer in this work. Others can take it up now, while the whole country is interested in Southern advancement, and reap the harvest.

In an interview with the MANUFACTURERS' RECORD Mr. Richards said: "We are delighted over the fact that the Northern and Western people at last have some

conception of the rapid strides the South is taking in industrial and agricultural development. Several years ago, when we commenced placing before them facts and figures relative to the opportunities existing along the Baltimore & Ohio Railroad, we experienced much difficulty in interesting them. They would not listen to truths, and we found it necessary to practically educate the people in regard to the country.

"The masses knew quite as much about some foreign country as they did about the South, and we found many who would hesitate less about going to a barbaric nation than to the South. Fortunately, printer's ink tells and the publications containing nothing but plain facts which were circulated among these people have brought to the upper South thousands who thoroughly examined the country and sent such favorable reports to their friends in the North and West that we now have the people seeking us instead of our going after them.

"Today we have coming to us the manufacturer, crowded to the action by reason of the shrewd competitor who in advance located in the South; the farmer and the stock-raiser, who are fully convinced that our low-priced lands and market facilities are features not to be overlooked; the investor and speculator, satisfied that safe investments and sure returns are only obtainable in the South.

"Only last week we located a manufacturer from New England on our line of road, after having negotiated three years with him. He was compelled to get nearer to raw material and markets. Had he taken our advice and made the change when we first suggested he would have saved thousands of dollars by reason of the difference in cost of production in the South as compared with the North. A farmer came to us from the Northwest recently, and, after locating in the South and testing the country, acknowledged that it would have been far better had he abandoned his farm and come here when we first solicited him.

"During a conversation last week with a Cleveland, Ohio, capitalist he expressed his opinion of the South thus: 'The South has wonderful possibilities. For several years my associates and myself were solicited to take a trip through the South, and, though skeptical as to finding the representations correct, we finally concluded to investigate. The result was we were so thoroughly pleased that we invested several hundred thousand dollars, and had less difficulty with our holdings in the South during the recent panic than with our Ohio interests. We find the people very courteous and hospitable; the banks are liberal and afford better accommodations than our Northern institutions. We have great faith in the South, and anyone contemplating a change of location will be profited by visiting that country. If the Northern people were more familiar with the South you would see a greater movement thereto. We shall from time to time increase the amount of our investments there.'

"Despite the hard times a great many persons are looking around with the view of locating. During the past two months we have settled about 1000 people on our line east of the Ohio river, which we are encouraged to believe speaks well for the upper South, and indicates that as soon as times brighten up a little and people in the North and West can dispose of their properties, there will be a heavier immigration to the South than ever known before.

"Our efforts to attract persons to the States of Maryland, Virginia and West Virginia from west of the Mississippi river are bearing excellent fruit. Kansas, Nebraska, Dakota, Minnesota and Iowa are sending to the upper South a large number of homeseekers.

"We are now advertising a series of landseekers' excursions from the West to the Shenandoah valley, Va., and will make low rates on certain days every month of this year. We anticipate good results from these excursions. Only today we received a letter from a correspondent in California stating that he and several of his neighbors were forming a colony to locate in West Virginia. If this is not turning things around I do not know what I'm talking about. The people who several years ago scoffed at the idea of trying to bring immigration southward should come now and follow our work, and they would soon realize that at last the people are being educated, and for prosperous and happy homes the South is unequalled."



## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 414.]

## Georgia Central Reorganization.

Official announcement of the reorganization plan of the Central Railroad of Georgia is awaited with considerable interest. This property, which will be controlled by the Southern Railway Co., operates about 2000 miles of road. It is stated that the plan of reorganization will provide for the issue of: First, \$7,000,000 of first-mortgage 5 per cent. 50-year bonds secured by mortgage on the main-line property of the company. Second, \$13,000,000 of consolidated 50-year 5 per cent. bonds secured by second mortgage on the main line, a first mortgage on the Montgomery & Eufaula and a second mortgage on the Mobile & Girard Railroad and other properties and equities. This issue may be increased \$5,000,000 additional at the rate of \$800,000 a year. Third, \$10,000,000 of bonds of the Central Railroad secured by first mortgage on the Savannah & Western, the Chattanooga, Rome & Columbus and Macon & Northern, together with other minor properties and equities. These bonds are to bear 2½ per cent. interest yearly for the first two years, which shall be increased one-half of 1 per cent. yearly until 5 per cent. is reached, which shall be the fixed rate until the bonds mature. Fourth, \$7,250,000 of 5 per cent., series "A," and \$7,750,000 of series "B" income bonds, the full interest on series "A" to be paid first. Fifth, \$7,500,000 of common stock.

The Southwestern Railroad is to be released from its obligations on the tripartite bonds and its endorsement of the Montgomery & Eufaula bonds by payment of the latter, and to be leased in perpetuity at the rate of 5 per cent. per annum. The Augusta & Savannah is to be leased at the same rate.

The pro rata distribution of the new issues is to be about as follows: To Savannah & Western bonds, 80 per cent. in new \$10,000,000 or third class of bonds and 20 per cent. in series "A" income bonds; to Macon & Northern bonds, 75 per cent. in the new third class of bonds and 25 per cent. in series "A" incomes; to holders of certificates of indebtedness, dollar for dollar in series "A" incomes; to Savannah & Atlantic bonds and to Columbus & Rome bonds, par in series "A" incomes.

The Central Railroad & Banking Co. is to discharge the indebtedness and pay the underlying bonds of the Savannah & Western and Chattanooga, Rome & Columbus roads. The new first-mortgage bonds will bear interest from October 1 next.

## Cost of the East Tennessee.

It is figured that the East Tennessee, Virginia & Georgia Railway, which was bought by the Southern Railway Co. at foreclosure sale for \$1,505,000, will cost that company over \$16,000,000. The company acquired possession of \$5,940,000 of the equipment and improvement bonds, issued September 1, 1888, out of a total issue of \$6,000,000. It also owns \$3,680,000 general mortgage bonds out of a total issue of \$5,719,000, dated December 1, 1890, and controls \$2,030,000 of the same bonds. This gives the company practical ownership of all but \$60,000 of the equipment bonds and all but \$9000 of the general mortgage bonds. The East Tennessee, it is calculated, therefore owes the Southern Railway Co. a bonded debt of \$11,650,000, which, with past-due interest, would run the debt up to at least \$12,000,000. In addition to this is the \$1,505,000 at which the road was bid in, or in all \$13,505,000. It is understood that the purchaser will also have a floating debt of at

least \$2,500,000 to take care of, making the whole investment over \$16,000,000. There are 1216 miles of track, and it would appear that the property was bought at the rate of about \$13,000 per mile.

## The L. &amp; N.'s Good Showing.

Reports of the fiscal year ended June 30 are now being given out, and every detail seems to emphasize the depressed state of trade during the year. No section was exempted, and hardly a railroad but shows some effect of the general falling off in business. Many lines not only failed to yield the usual dividends, but had a struggle to take care of fixed charges and avoid insolvency. The Southern roads did not escape the wave of hard times, although the pressure to many of them did not leave any lasting effects. Some even kept up their dividend-paying capacity, although showing a decided falling off in receipts and traffic. The Louisville & Nashville was one of these. Its gross earnings fell off \$3,442,762, yet it shows a surplus available for dividends on stock of fully 3 per cent. Economy is evidenced in operating expenses, a decrease of \$2,569,074 being shown.

The proportion of expenses to earnings is reduced from 64.20 per cent. the preceding year to 62.31 per cent. The net earnings show a decrease of \$873,688. The annual charges increased \$173,981. A noteworthy improvement is to be observed in the dealings of the company with other roads. For instance, the previous year its share of the loss on the Georgia Railroad, of which it is joint lessee with the Central Railroad, was \$70,978. The year just closed reduced it to \$24,784. The settlement of the Hardin suit the preceding year also took \$225,737 out of the company's treasury. The total losses in 1892-93 were \$423,758, and in 1893-94 \$165,851, a difference of over \$250,000. The directors of the company have been maintaining a conservative policy, and did not deem it expedient to declare a dividend from the results of the year. This leaves the company with ample ready cash and strengthens its position. In deciding to pass the dividend the directors state that "in view of the unfavorable business condition prevailing throughout the country, it is believed to be for the best interests of the stockholders that the company's resources should be kept in hand." The following details of the report will be of interest:

|   |              |
|---|--------------|
| Gross earnings.....                     | \$18,960,877 |
| Operating expenses.....                 | 11,813,569   |
| Net.....                                | \$7,147,308  |
| Proportion expenses to earnings, 62.31. |              |
| Interest and rentals.....               | \$5,954,260  |
| Taxes.....                              | 600,517      |
| Total charges.....                      | \$5,664,777  |
| Balance.....                            | \$1,482,531  |
| Other Income.....                       | 340,757      |
| Total surplus.....                      | \$1,823,288  |
| Loss Georgia Railroad.....              | \$24,784     |
| Loss other roads.....                   | 141,067      |
| Total loss.....                         | \$165,851    |
| Available surplus.....                  | \$1,657,437  |
| Net Surplus.....                        | \$1,657,437  |

## Montgomery &amp; Eufaula.

A decree has been rendered in the United States Court at Montgomery, Ala., foreclosing the mortgages held by the Farmers' Loan & Trust Co. of New York against the Montgomery & Eufaula Railroad. The suit involved \$1,641,700. On June 12, 1879, the Montgomery & Eufaula Railroad issued \$1,500,000 worth of bonds. These bonds are now held by the Farmers' Loan & Trust Co. of New York as trustee. The interest was paid up regularly until July, 1893, when the roads had not earned enough to meet the payments, and since that time the road has failed to liquidate the interest. The court decree orders the railroad company to pay the Farmers' Loan & Trust Co. the principal, back interest and costs, amounting to \$1,641,700, before September 1. If this not done the property is to be sold, and

J. W. Dimmick and Henry H. Epping are appointed commissioners to arrange such a sale. The road extends from Montgomery to Eufaula, a distance of about eighty miles, and is part of the Georgia Central system. This would make the second foreclosure sale of this road. The first was in 1879, when it was bought by W. M. Wadley for \$2,120,000 and transferred to the present company.

## Important Stock Sale.

The attention of many railroad people is fixed on the approaching sale of the stock of the Alabama Great Southern Railway Co., Limited, deposited with the Central Trust Co. of New York City as collateral under the Cincinnati extension mortgage. The sale is fixed for August 22, and will convey, free of any lien or claim whatever, the title to a controlling interest in the Alabama Great Southern Railway Co., Limited, and the Cincinnati, New Orleans & Texas Pacific Co. There is some speculation as to the probable purchaser. It is reported that a syndicate has been formed to purchase the property at the sale in the interest of the Richmond Terminal reorganization. In the hands of the Southern Railway Co. the property could be profitably operated in connection with the East Tennessee, Virginia & Georgia. The Cincinnati, Hamilton & Dayton, which is ambitious to enter Southern territory, is also a likely purchaser.

## Foreclosure Sale.

This has been a notable year for foreclosure sales of railroads. Most of the Southern roads so disposed of are part of the Richmond Terminal, and the sales are made in pursuance of the plan of reorganization. The Richmond & Danville, East Tennessee, Charlotte, Columbia & Augusta and Columbia & Greenville have already been bought by the Southern Railway Co., and the following sales are fixed: Louisville Southern, 130 miles, on August 16; Georgia Pacific, 566 miles, on August 18; Western North Carolina, 309 miles, on August 21; Northwestern North Carolina, 100 miles, on August 21; Oxford & Clarks-ville, sixty-six miles, on August 22.

## Railroad Notes.

A. POPE has been appointed general freight and passenger agent of the Savannah, Americus & Montgomery Railroad to succeed C. W. Cheers, who resigned to become general manager of the Georgia Midland & Gulf Railroad.

THE Arcadia, Gulf Coast & Lakeland Railroad has been ordered sold for the benefit of its creditors. Track has been laid on the line from Braidenton to Sarasota, Fla. Gaboury & Armstrong are the contractors, and hold a lien of \$3700. The sub-contractors' liens amount to \$18,700.

THE Valdosta Southern Railroad, on which about eight miles of track has been laid from Valdosta, Ga., has been purchased by J. M. Wilkinson, E. L. Moore, N. A. Williams, T. G. Crawford and others.

APPLICATION will be made for a decree for the sale of the Savannah, Americus & Montgomery Railroad under a foreclosure of the first mortgage. The bondholders will purchase and reorganize the property. The reorganization is in the hands of a committee of which John Gill, of Baltimore, is chairman.

THE last receivership for the Atlanta & Florida Railroad was of but brief duration. T. W. Garrett was appointed to that position on the petition of the American Trust & Banking Co. on July 19. The following day the railroad paid off the claims and the receivership was ended. The road is said to be in good condition, with bright prospects.

## FINANCIAL NEWS.

## New Financial Institutions.

Baltimore, Md.—The Guarantee Building & Loan Co. has been incorporated by Michael J. Conway, Wm. J. Taylor, B. V. Keelan, D. F. Conway and Alfons von Wyszecki. The capital stock is \$1,000,000.

Knoxville, Tenn.—Equitable Home Building Association has been formed by W. B. Mitchell, R. H. Hart, W. O. White and others. The capital stock is \$50,000.

Richmond, Va.—The Richmond Beneficial & Insurance Co. has been chartered with W. T. Graham, president. The capital stock is \$5000.

Savannah, Ga.—The Savannah Mutual Loan Association has been chartered by James S. Wood, W. R. Leaken, David B. Morgan and others. The capital stock is \$20,000.

Staunton, Va.—The Farmers' Mutual Fire Insurance Co. has been chartered with John J. Laren, of Greenville, Va., as president. The capital stock is to be not less than \$10,000.

## New Bond and Stock Issues.

Clay, W. Va.—An election will be held by Clay county on August 19 to vote on a proposition to subscribe \$25,000 in aid of the construction of the Charleston, Clendenin & Sutton Railway.

Jacksonville, Fla.—The city has sold \$900,000 of water-works bonds to W. N. Coler & Co., of New York city.

La Porte, Texas.—The La Porte, Houston & Northern Railroad Co. has been authorized to issue bonds at the rate of \$15,000 per mile on twenty-two miles of road.

## Interest and Dividends.

Bartow, Fla.—The Polk County National Bank has declared a semi-annual dividend of 7 per cent.

Crowley, La.—The Crowley State Bank has declared a semi-annual dividend of 4 per cent.

Cumberland, Md.—The Cumberland Improvement Co. has declared a dividend of 3 per cent.

Gaston, N. C.—The First National Bank has declared a semi-annual dividend of 4 per cent.

Hagerstown, Md.—The First National Bank has declared a semi-annual dividend of 5 per cent.

Macon, Ga.—The Exchange Bank has declared a semi-annual dividend of 3½ per cent. and added \$10,000 to its surplus fund.

Montgomery, Ala.—The Capital City Insurance Co. has declared a semi-annual dividend of 4 per cent.

Newberry, S. C.—The Newberry Cottonseed Oil Mill & Fertilizer Co. has declared a dividend of 8 per cent.

Statesville, N. C.—The Davis & Wiley Bank has declared a semi-annual dividend of 4 per cent.

Wheeling, W. Va.—The Provident Life Insurance Co. has declared a semi-annual dividend of 3 per cent.; Fire & Marine Insurance Co., 3 per cent.; German Fire Insurance Co., 5 per cent., and the Franklin Insurance Co., 3 per cent.

Winchester, Tenn.—The Bank of Winchester has declared a semi-annual dividend of 5 per cent.

Winchester, Va.—The Shenandoah Valley National Bank has declared a semi-annual dividend of 5 per cent.

## Financial Notes.

A PLAN is proposed for the reorganization of the First National Bank of Nashville, Tenn., upon a basis of \$600,000 capital stock.

A SALE of 953 shares of stock in the Lynchburg (Va.) National Bank was recently effected at \$135 per share.



## SOUTHERN TEXTILE INTERESTS.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on page 413.]

## FACTS ABOUT COTTON.

## A Manufacturer's Views as to Present Outlooks for Ginning.

Mr. D. A. Tompkins, of North Carolina, a cotton manufacturer of long experience, has been spending some time among the factories of New England. While there he had impressed upon him some facts that will be of interest to all Southern cotton-growers. In a published newspaper interview he says:

"Ten years ago there was no Egyptian cotton imported into the United States. Within ten years its importation has increased from nothing to 40,000 bales, or about 28,000,000 pounds, valued at about \$3,000,000. These are the figures given by the United States consul at Cairo. Egyptian cotton first came into use here in the manufacture of balbriggan hosiery. It is this cotton which gives the peculiar brown color and silky lustre to some knit goods. The popular color of much of the best knit underwear is due to the Egyptian cotton from which they are made. All efforts to imitate this by dyeing the American cotton have been unsuccessful. The price of Egyptian cotton is only from one to two cents more than American cotton. Some people have been expecting that the South would demand protection against Egyptian cotton. While it is far cheaper than our Sea Island cotton, it is better than our ordinary upland, and has a better color and lustre than our best grade of improved upland.

"It is said that the improvement in the production of cotton in Egypt is greatly due to the Confederate officers who were engaged in this country by the Khedive to reorganize his army. These officers in many cases gave attention to other things besides military affairs. Among these things was the importation from the United States of quantities of Sea Island cottonseed, which were used in the valley of the Nile. The good quality of cotton now brought to this country from Egypt is said to be the outcome of the work done in improving cotton culture in Egypt by these ex-Confederates.

"The Egyptian cotton has almost entirely taken the place of American cotton abroad for the production of lisle-thread goods. The extent of its introduction in this country would be enough to show that it must be making even greater headway abroad. Outside the United States it is now largely used where American Sea Island cotton was used formerly.

"Since the civil war in the United States the tendency down here has been to gin the cotton immediately after it is picked. It is a well-known fact that better cotton was made before the war, when the seed cotton was stored as it was picked, and then ginned at leisure. It is believed that storing before ginning gave time for the fibre to absorb just a little oil from the seed, which gave it some of that brown color and silky lustre peculiar now to the Egyptian cotton. Prior to the war, too, cotton was ginned by mule-power, a much slower process than that now in use, so that the fibre was less cut than it now is by the steam gins.

"The color and lustre gained by the fibre from the oil in the seed while in storage are not the only advantage gained. The dry and cut cotton as it is now ginned easily generates electricity, thus charging each fibre so that it tends to stand on end. This tendency in some cotton has been found to be so great as to almost prevent its use for spinning. The Egyptian cotton is said to be better in this respect, and it is thought a great improvement could be

made in the American staple by holding the seed cotton in storage from one to three months and then ginning it carefully. It is probable that by these means our improved upland staples can be made to serve all purposes as well as the Egyptian cotton, and thus the South may get back some valuable trade lost in the markets both of this country and abroad. Certainly, if the South desires to continue to hold the markets, as, of course, she does, we must make better and cheaper cotton and put it on the market in the best possible shape."

## The South's Cotton-Manufacturing Advantages.

Mr. George Ingham, agent for the United States and Canada of the textile-machinery house of Brooks & Doxey, of England, has recently made an extensive tour through the South. Mr. Ingham has long been familiar with Southern textile interests, and as he has been engaged in all lines of textile manufacturing and textile machinery handling for many years, his views on the future of this business in the South are of great interest. Mr. Ingham takes exception to the claims of many people that the South cannot develop the manufacture of the finest grades of cotton goods. He holds that the natural advantages of this section are so great that there must be a rapid increase throughout the entire South. Not only, according to his views, will this be along the Piedmont region, but in other parts of the South, though the coast cities are probably less favorably located than any others, because as shipping centres they draw cotton for foreign export and make it more difficult for the mills to secure as favorable prices as interior mills. There is not, he says, any climatic reasons which will prevent the steady growth of cotton manufacturing in the South, nor is there any reason why the South will not be able to produce as fine goods as New England or any other country. Its advantages with the cotton raised immediately around the mill, its excellent facilities, its lower cost of living, thus guaranteeing for all time low cost of production, give the South such controlling advantages in this industry that no other section can compete with it. It is necessarily only a question of time when the South must inevitably control the cotton goods trade. It is not only in cotton manufacturing interests that the South must lead, for it produces the cotton for the world's markets and can produce two general crops per year, and can also grow wheat and corn and all various kinds of fruits and vegetables very largely. Its mineral and water-power resources are almost unlimited, and if its farmers and cotton-growers will go in for deep ploughing and fertilizing their crops would be abundant and their cotton would be worth from one to two cents more per pound or even more, because they would turn over virgin soil that has not seen the dawn of day for centuries. Now that the South is going in for diversified crops more and more every year, its productions will be immense. In view of Mr. Ingham's familiarity with the business, having grown up in cotton mills, and of the fact that he represents one of the greatest textile-machinery houses of England, gives added weight to his views.

## New England vs. Southern Mills.

A private letter from the North says: "It is rumored that the Amoskeag Company will give up gingham in the near future, as they cannot compete with the South on this class of goods. They will make finer and new classes of goods not

made in this country at the present time. I think the gingham trade will eventually go to the Southern mills, and the mills up here will have to make a finer class of goods."—Charlotte (N. C.) Chronicle.

## Notes.

CARDING machinery for working up waste will be put in the Linden Manufacturing Co.'s mill at Davidson, N. C. Several plans for enlargement are also under consideration, including the introduction of more looms and spindles.

THE new addition to the Union Cotton Mills at La Fayette, Ga., is now under way. It is of brick, three stories high, 32x76 feet, and the first floor is to be the cloth-room, second floor the picker-room and third floor the slasher-room. This machinery is already on hand in the present mill, and when removed into the new addition will be replaced by weaving machinery for making fine sheetings or towelings. Mr. A. R. Steele is president of the company.

THE new addition lately contracted for by the Midway Mills (Leak, Wall & McRae, proprietors), of Rockingham, N. C., is now in course of erection. Upon completion of the building considerable new machinery will be put in.

A 100-TON cloth baling press, now being built by the Liddell Iron Works, of Charlotte, N. C., is said to be the first machine of the kind ever made in the South. The press is to be put in the new Dilling mill at King's Mountain, N. C.

THE Glencoe Cotton Mills, of Burlington, N. C., is making extensive improvements to its water-power, such as raising the dam, putting in water-wheel and building new wheelhouse. It is also proposed to either remodel the present spindles or put in new ones.

THE new addition now being built to the Odell Manufacturing Co.'s mill at Concord, N. C., is to be a cloth and slasher building two stories high, 65x35 feet. Fifty-four new Whitin looms will be put in and 1800 more spindles for manufacturing white cloth. An electric pumping plant will also be installed to supply the mill with water. Mr. J. M. Odell is president, and F. L. Emery, superintendent.

THE stockholders of the Dilling Mill Co., of King's Mountain, N. C., held their annual meeting last week and re-elected Mr. Craig, of Gastonia, as president, and Mr. F. Dilling as secretary-treasurer. The company's mill buildings are rapidly nearing completion, and the plant will soon be in operation.

THE Maginnis Cotton Mills, of New Orleans, La., has closed its mill No. 1, owing to a small strike on the part of the girl operatives because of a reduction in wages. Mill No. 2 is running with a full force of hands and a considerable number of extra ones from mill No. 1.

THE stockholders of the Clover Cotton Manufacturing Co., of Clover, S. C., held a meeting on the 13th inst., and elected Mr. J. W. Neill, president, and Mr. M. L. Smith, secretary-treasurer. The directors chosen are Messrs. J. W. Neill, W. B. Smith, G. L. Riddle, J. B. Jackson, T. P. Whitesides, O. A. Hamlin, W. D. Leslie, J. J. Wilson and J. M. Stroup.

A MOVEMENT for the establishment of a knitting mill at Madison, Ga., has been inaugurated, and the citizens have taken hold of the project in earnest. A proposition from Colonel Becker, of Snapping Shoals, for the removal of his plant will probably be accepted.

A REPORT states that Mr. J. Hansel Wood, of Waco, Texas, is in receipt of a letter from representatives of a \$2,500,000 syndicate concerning the erection of a new cotton mill. The syndicate invites offers from the citizens of Waco.

## Cottonseed-Oil Notes.

THE convention of cottonseed growers announced to follow the congressional convention was held at Vicksburg, Miss., on the 12th inst. Capt. W. W. Moore, of Sharkey county, was called to officiate as temporary chairman pending the arrival of Senator W. G. Kiger, who, with others, was engaged in framing a constitution and by-laws for presentation to the convention. Upon motion of Colonel Johnson permanent organization was effected by the election of W. G. Kiger as president, A. S. Fegeland as secretary and D. S. Casey, of Sharkey, as recording secretary. The report on constitution and by-laws was then called for, the proposed articles read, debated at length section by section and finally adopted. They provide for the organization of a planters' interstate cottonseed bureau, having for its object the establishment of State boards of agriculture to co-operate with the department at Washington, and the securing for the cotton planter fair remuneration for his cottonseed and other products. The annual dues were fixed at \$1.00, and every delegate was enrolled as a member of the permanent organization. An executive committee from each county and parish represented was agreed upon. The convention then adjourned, after providing for an immediate session of the executive committee. This session was accordingly held, and the committee organized by electing Dr. W. G. Kiger chairman and D. S. Casey, secretary. The committee adjourned to meet in Vicksburg on August 12. Other counties in Mississippi and Arkansas and other parishes in Louisiana will be asked to organize and send two members to the executive committee. The convention was a representative one of all the counties and parishes interested, and the movement is likely to command the support of all agriculturists in the States comprised in the original call.

THE San Marcos Oil & Gin Co. held its annual meeting at San Marcos, Texas, on the 10th inst. The entire old board of directors was re-elected. At the election of officers the president, secretary and treasurer were retained in office, they employing the old superintendent and manager. The company expects to have its mill in readiness to commence operations about September 1.

MR. EDWARD BADART, president of the Cotton Oil Refining Co., of Baltimore, has just returned from a trip among the cotton-oil mills of Texas and is now on his way to Europe, where he will investigate the markets and look into the general conditions of the business.

THE cottonseed-oil mill at Union, S. C., held its annual meeting on the 13th inst. and declared a good dividend. The dividend will be used in remodeling the mill. A handsome new engine is to be put in, and one that is in every way superior to the old one.

Ball Flat, Ala.—The Thomas Stave Co.: "We think the outlook for business in the South is better than it has been for several months. Business in this section is on the mend, as firms have been waiting on the tariff."

Fairburn, Ga.—McCurry & Inman: "Our opinion is that business will be better than the past season. The crop prospect is very good, and we see no reason why there will not be a decided improvement in every branch of trade."

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.



## PHOSPHATES.

## Sulphuric Acid Manufacture.

By Peter S. Gilchrist, Charleston, S. C.

The great discoveries of phosphate beds in the South have led to a more general use of available phosphates in the agricultural world. In the manipulation of these phosphates sulphuric acid plays an important part, it being necessary to convert the tri-basic phosphate of lime into superphosphate, or what is generally known as acid phosphate, an excess of sulphuric acid being necessary on account of the other foreign elements present. Following the discovery of these phosphate beds comes the necessity of cheap sulphuric acid. This acid is used for many other purposes, as it is generally the base of all chemical manufactures, and, to quote an English statesman, "the amount of sulphuric acid made gages a country's greatness."

Up to a few years ago the manufacture of sulphuric acid in this country was very simple—sulphur furnaces and plain leaden chambers for condensation. Later was added Glover and Gay Lussac towers for the recovery of nitre and the introduction of pyrites in lieu of sulphur. Today, when competition is so keen, it is very essential that sulphuric acid be produced as cheaply as possible. To this end there are three important points to be watched, namely, location, construction of plant and supervision. The first appeals to all; the second and third do not receive the attention they deserve. An acid plant has to be built, and as, in some cases, it has to be put up as cheaply as possible, the consequence is usually plain sulphur furnaces and open chambers are decided upon. The final result too often is incomplete oxidation in the furnaces, a high consumption of nitrate of soda and a poor yield of sulphuric acid which means high-priced acid. Or again, the intention may be to put up a modern plant. The owners visit numerous establishments and adopt this or that plan, or a modification of both or of many, and after great expense they find they do not get the yields they anticipated.

The trouble is not far to seek. The various parts of the whole do not bear the ratio necessary to each other, and this is specially so in connection with the absorption and denitrating towers; hence a little expert advice in the construction may save trouble and expense in the future.

The management of an acid plant is no sinecure, as it requires care and close observation to get the maximum yields. An interchange of the results of working between different establishments would be conducive to better work.

A sulphuric-acid plant is necessarily a large structure in comparison to the amount produced, and which is still more important, a costly one. Scientists for many years have tried to reduce the size of the chambers necessary for condensation, and only recently has it been done on a practical basis.

Professor Lunge, of Zurich, Switzerland, brought out his plate towers in connection with chambers and attained very satisfactory results, but, owing to the great cost, have not been adopted to any extent in this country. Then came the Hacker and Gilchrist's pipe columns in conjunction with chambers, which have met with great success in this country, increasing the production 25 to 50 per cent.

The pipe column is a small leaden tower which is filled with pipes, preferably horizontally, which are burnt to the sides of the tower, and are so placed as to continually break the course of the gases as they pass through. Air of ordinary atmospheric temperature is drawn through these pipes by means of a stack.

The gases in passing through the column are very thoroughly mixed by coming in con-

tact with each successive layer of pipes, causing the particles forming to interact more quickly, and the large, moist surfaces of the numerous pipes upon which the gases impinge are conducive to a great chemical reaction, owing to the rapid formation of sulphuric acid. Moisture is introduced as steam along with the gases, and the heat consequent upon the reaction is carried off by the cold air passing through the pipes.

The ratio of chambers have an important bearing on the amount of work to be done in a given space; it has been found that the best results are obtained by putting the pipe columns in conjunction with short chambers.

The pipe columns produce the same conditions as are maintained in the chambers, only greatly improved on, and not only is the amount of acid produced from a given chamber space much greater, but the yield is also higher from the material used. Plants erected on this system are built at much less cost, as the chambers and buildings are so much smaller; they are easier regulated and less liable to oscillations; they need no special supervision save the ordinary attention given to the chamber process.

These pipe columns can be added to existing plants in a short time without serious modifications. The results obtained from the pipe columns point to a still greater reduction of chamber space in the future than has yet been obtained, and are attracting great attention from manufacturers both here and abroad.

All plants erected on this system are in the South, showing that the spirit of enterprise is not dormant.

## Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, July 19.

In the local market the movement in phosphate is quiet and prices steady and unchanged. Manufacturers are not purchasing heavily for the coming season, as they expect lower values to rule later on. The situation, however, in the mining sections of South Carolina and Florida is considered healthy and the foreign demand active. There is also a domestic inquiry which it is expected will result in considerable future business. The receipts of rock at this port for the month of June amount to 10,475 tons, of which 8888 tons were from Charleston, S. C., and 1587 tons from Florida. The receipts for the six months ending June 30 aggregate 49,565 tons, of which 38,265 tons were from South Carolina and 11,300 tons from Florida. The charters reported during the past week were the schooner Luella Wood, Battery Creek, S. C., to Baltimore, and schooner B. F. Lee, Charleston to Richmond, Va. In New York charters are firm, with a light demand for steamers. A British steamer, 1293 tons, reported taken from Fernandina, Fla., to Stettin with phosphate rock at 19s. 6d., August; a British steamer, 1223 tons, from Tampa to Stettin with phosphate rock at 19s., August; a British steamer, 1280 tons, from Tampa to Rotterdam with phosphate rock at 19s., end of July. The general market for phosphate closes very steady, as follows: South Carolina rock \$4.25 to \$4.50 for crude, \$5.00 to \$5.25 for hot-air-dried and \$6.50 for ground rock, all f. o. b. Charleston. Florida rock is firm at \$4.00 to \$4.25 for 60 per cent. river pebble, \$4.50 to \$4.75 for 65 per cent. and \$5.00 for 70 per cent., all f. o. b. Punta Gorda or Tampa.

## FERTILIZER INGREDIENTS.

The market for ammoniates continues firm, owing to low freights ruling from Chicago and Kansas City to Southern markets. Stocks of material here have been well sold up. Blood and tankage are in light supply and values unchanged. Sulphate of ammonia is steady with values

unchanged. There is a fair demand for nitrate of soda, with stocks not excessive and prices firm.

The following table represents the prices current at this date:

|                                |                    |        |
|--------------------------------|--------------------|--------|
| Sulphate of ammonia, gas.....  | \$3 50@            | \$3 75 |
| Sulphate of ammonia, bone..... | 3 30@              | 3 35   |
| Nitrate of soda.....           | 2 35@              | 2 40   |
| Hoof meal.....                 | 2 25@              | —      |
| Blood.....                     | 2 25@              | 2 30   |
| Azotine (beef).....            | 2 25@              | —      |
| Azotine (pork).....            | 2 25@              | —      |
| Tankage (concentrated).....    | 2 10@              | 2 15   |
| Tankage (9 and 20).....        | \$2.10 and 10 cts. | —      |
| Tankage (7 and 30).....        | 19 50@             | 20 50  |
| Fish (dry).....                | 23 50@             | —      |
| Fish (acid).....               | 17 50@             | 19 50  |

CHARLESTON, S. C. July 17.

The phosphate market here during the past week has remained steady and little changed from that of the week previous. The demand continues good, and the domestic markets will open up with considerable more activity as soon as the prevalent unsettled state of business begins to show signs of stability and resume its normal course. Inquiries from foreign buyers are numerous, and several charters are noted for early shipments. Prices quoted are about \$4.25 for crude, \$4.75 for hot-air dried and \$6.50 for ground rock, all f. o. b. Charleston. The shipments coastwise were S. B. Ray, 600 tons for Baltimore; M. S. Bradshaw, 500 tons for Seaford, Del.; E. G. Hight, 725 tons for Baltimore, while in port and loading are the Josephine, H. B. Hussy, Emma C. Knowles, Annie C. Grace and Fannie Brown. The coastwise shipments since September 1, 1893, are 113,742 tons crude, 4837 tons ground rock, against 97,757 tons crude, 2340 tons ground rock for same date last year. The plant of the Royal Fertilizer Co., lately purchased at private sale, will be put in running shape and commence operation at an early date. The Atlantic Phosphate Co. has gone into liquidation, and its plant will be sold the latter part of the month. It is rumored that a syndicate has been formed to purchase and operate it for the coming season.

## Phosphate and Fertilizer Notes.

THE stockholders of the Newberry Cottonseed Oil Mill & Fertilizer Co. held their annual meeting at Newberry, S. C., on the 4th inst. Business for the past year was found to have been very satisfactory, and a dividend of 8 per cent. was declared. Mr. L. W. Floyd has been elected president, secretary and treasurer, and Mr. T. M. Neel, vice-president.

THE phosphate shipments through the port of Fernandina, Fla., during the six months ending June 30 amounted to 69,510 tons, against 54,591 tons for the corresponding period last year, being an increase of 15,000 tons. The following charters are reported for the month of July: Steamships Sargassa, Norlands and Alicia, 6000 tons, by the French Phosphate Co.; steamships Tockwith and Bennington, 4500 tons, by the Anglo-Continental Guano Works; steamship Terrier, 2000 tons, by Dutton & Co.; steamships Carlisle and Carolina, 4500 tons, by the Dunnellon Phosphate Co.; steamships North Gwalia and Sydenham, 6000 tons, by A. Neuman; steamship Terstein, 3000 tons, by B. Arentz & Co., and schooner not named, 900 tons, by the Albion Phosphate & Mining Co.

IT is stated that C. W. Hays, geologist of the United States geological survey, with headquarters at Sheffield, Rhea county, Tenn., has received instructions to make some investigations in east Tennessee, Georgia and Alabama to determine the presence or absence of deposits of phosphate rock similar to that in middle Tennessee.

A VERY strong corporation was organized in Ocala, Fla., last week for the purpose of mining phosphate and to trade in and manufacture lumber, etc. The capital stock of the company will be \$100,000 in 1000 shares of \$100 each. The names of the incorporators are as follows: Wil-

liam S. Trimble, Hogansville, Ga.; James M. Graham, Gainesville, Fla., and Edward Holder, Cincinnati, Ohio. The corporation is to be known as the "Associated Phosphate Co.," and it is stated will control an immense amount of phosphate.

MR. K. B. HARVEY, deputy collector of the sub-port of Punta Gorda, Fla., reports the entries and clearances as follows: July 3, schooner Jacob W. Haskell, Galveston; 5th, British steamship Azalia, New York, and on the 9th the American schooner Sarah E. Palmer, Havana. The American schooner Jacob W. Haskell cleared on the 6th inst. for Pensacola with 700 tons of phosphate from the Peace River Phosphate Co.

MR. W. W. ELLIOTT, deputy collector of the port of Beaufort, S. C., reports the following clearances on the 13th inst.: British steamship Flowergate with 2000 tons of phosphate rock for Newcastle and Hull, England, and British steamship Inverness with 2963 tons for Bristol, England. Both cargoes were from the Farmers' Mining Co., Coos-w.

THE British steamship Kingdom cleared from Brunswick, Ga., last week with 2180 tons of phosphate for Memmel from the Brunswick Terminal Co. The British steamship Serapis arrived at Brunswick from Swansea and will load phosphate for the Brunswick Terminal Co.

THE total phosphate shipments from Fernandina, Fla., since July 1 amount to 9452 tons, distributed as follows: Steamship Tockwith, for Stettin, with 2700 tons from the Dunnellon Phosphate Co.; steamship North Gwalia with 3000 tons for Stettin, Germany, by B. Arentz & Co.; steamships Sargassa and Alicia with 3754 tons for Stettin from Anglo-Continental Guano Works.

THE steamship Feliciano sailed from Tampa, Fla., on the 14th inst. for Hamburg with 2827 tons of phosphate, and the steamer Tolafa on the 15th inst. with 1628 tons of phosphate for Baltimore. The steamship Heathfield, from Tampico, arrived on the 15th inst. to load 2500 tons of phosphate.

BY the recent sale of the Royal Fertilizer Co.'s works, at Charleston, S. C., the property has passed into hands that will, it is said, put it immediately on a firm working basis. The sale of the Atlantic Phosphate Co.'s plant for the latter part of July will also dispose of a large and fine phosphate property.

THE sale by the master in equity at Mount Pleasant, Berkeley county, S. C., will release from long litigation and put upon the market the phosphate tract of 510 acres at Ten-Mile Hill, a large portion of which is said to contain a valuable deposit of high-grade rock. The mining operations on this tract were stopped by an injunction several years ago.

SHORT stories of a high standard are notable features of McClure's Magazine for July. The picturesque side of very practical and matter-of-fact institutions are presented in "The Heraldry of the Plains," by Miss Alice MacGowan, and "A Chemical Detective Bureau," by Miss Ida M. Tarbell. The first exhibits the humors and conventions of cattle-branding as practiced on the great ranges of the Southwest, and the second describes the work of the Municipal Laboratory of Paris in promoting the public health. Both articles are well illustrated. Along similar lines is an article which reports the observations and experiences of an actual workman in the Homestead steel mills. "Alphonse Doudet at Home," by R. H. Sherard, details the story of his early life and literary struggles.

Monroe, N. C.—Monroe Foundry & Machine Co.: "To judge the future by our start, we think the outlook good."







and well-bucket staves. From fifty to sixty men will be employed at the plant.

THE Gardner & Lacey Lumber Co., of Georgetown, S. C., has completed its immense dry-kilns built to replace the ones recently destroyed by fire. The new kilns are said to be entirely fire-proof.

MR. R. E. L. EVANS, of Thomson, Ga., has purchased the Gross saw mill, and is sawing oak, pine, hickory, ash, sweet gum and poplar in large quantities. The plant has a daily capacity of 8000 feet.

A COMPANY to be known as the Hatton-Taylor Mill Co. was organized in Pensacola, Fla., last week with a capital stock of \$10,000. The following officers were elected: President, Hugh B. Hatton; vice-president, Edgar Taylor; secretary, John F. Collins, and treasurer, P. F. Hatton. The company is located in Jackson county, about four miles north of Chipley. The mill manufactures lumber and does a general milling business. Operations will begin about August 1.

THE following vessels cleared from Brunswick, Ga., last week with lumber and timber: Bark Winifred for Dublin, Ireland, with 550,000 feet of timber from Hunter, Benn & Co.; bark Sigundet for Las Palmas with 84,000 feet of lumber from Rosendo Torras, and bark William Bateman for Grimsby with 370,000 feet of lumber from the Hilton-Dodge Lumber Co. The schooner Greenleaf Johnson arrived from New York to load a cargo of lumber from Wheelwright & Co. for New York. The schooner Frank M. Howes, from Boston, is expected to arrive and load lumber.

THE Gauley Lumber Co. will soon complete a railway from its mills at Belva, W. Va., at the head of Blue creek, down that stream three miles to Spruce fork and up the latter four miles. The company owns a tract of 60,000 acres of hardwood, and will extend the line as the timber is cut.

AT a special session of the Circuit Court, held at Buckhannon, W. Va., on the 13th inst., Judge Bennett decided the attachment cases against the Buckhannon River Lumber Co. in favor of the attaching creditors and against the Michigan claimants.

ONE of the dry-kilns of R. C. Miller & Co.'s saw mill, at Napier, Texas, on the Houston, East & West Texas road, was destroyed by fire on the 10th inst.; loss \$5000, with no insurance.

THE shingle mill of the Long Manufacturing Co., of Beaumont, Texas, made one of its record-breaking cuts last week when, with its average capacity of 175,000 per day, it turned out 255,750 shingles. On the 11th inst. the mill shut down for an indefinite time.

AFTER a shut-down of forty days, operations at the plant in Village Mills, Texas, were resumed on the 12th inst.

THE Reliance Lumber Co., of Beaumont, Texas, has established an agency in New York city which will have charge of all the Eastern business of the company.

THE Clyde steamship Algonquin sailed from Jacksonville, Fla., for New York on the 12th inst. She cleared with 300,000 feet of yellow-pine lumber, 50,000 shingles and miscellaneous cargo.

THE schooner Harold J. McCarthy, from Baltimore, will load lumber from Fairhead, Strahn & Co. to Baltimore or Boston.

THE Williamsport & Chesapeake Lumber Co. will commence on Monday next, at Sparrow's Point, to saw up the logs which came down the Susquehanna river in the great freshet of June. There are about 40,000,000 feet to be disposed of, and it is estimated that it will take a year and a-half to complete the work.

It is stated that the Lutzer & Moore Lumber Co., of Orange, Texas, is intending to cut oak, ash and walnut, in addition to

yellow pine, in order to supply the demand for hardwood in Western and Southwestern markets, which has largely increased of late.

### Iron Markets.

CINCINNATI, July 14.

The indications are that the great railroad strike is off. Great damage has been done, but the loss falls, perhaps, more severely upon the strikers, who can least afford it. The strong arm of the law has been felt, and the unreasonable strike has met with no public sympathy.

The situation in the Mahoning and Shenango valleys has not changed. Furnaces are not in receipt of sufficient coke to run, and they are still idle. In the South the strike was felt far more than was supposed by those in the North, and shipments were very much curtailed at important iron-manufacturing points, and absolutely suspended at some of the smaller ones, but order is coming out of chaos, and the furnaces are doing well in trying to get iron forward. The coal miners throughout the country are working only in a limited way, and it cannot be said that the local strike is absolutely over. It is the general opinion that labor difficulties will gradually be dissipated by the exercise of common sense on the part of the laborers and mechanics and greater wisdom on the part of the employers, so that with opening of fall trade there will come up a betterment of the conditions all along the line. Consumption is sufficient to absorb all of the iron being made in the South, and more furnaces will be put in blast or prices advanced with the revival of business. An important furnace will go in blast at Sheffield. Stock is now being accumulated.

There is better activity in the steel line, and yet the aggressive spirit of the leading Western producers to sell against all comers and take the business independent of competition has had its natural impress on prices, which have not been considered as an important element somehow in their taking orders.

Subject to change, we quote as the market for the moment as follows:

|   |               |
|---|---------------|
| Southern coke No. 1 foundry.....              | \$10 25@10 50 |
| South. coke No. 2 foundry and No. 1 soft..... | 9 50@9 75     |
| Hanging Rock coke No. 1.....                  | 12 00@12 50   |
| Hanging Rock charcoal No. 1.....              | 16 00@17 00   |
| Tennessee charcoal No. 1.....                 | 14 00@14 50   |
| Jackson county stone coal No. 1.....          | 14 50@16 00   |
| Southern coke, gray forge.....                | 8 75@9 00     |
| Southern coke, mottled.....                   | 8 50@8 75     |
| Standard Alabama car-wheel.....               | 16 25@17 25   |
| Tennessee car-wheel.....                      | 15 50@16 00   |
| Lake Superior car-wheel.....                  | 16 00@16 50   |

We quote for cash f. o. b. St. Louis:

|                              |               |
|------------------------------|---------------|
| Southern coke No. 1.....     | \$11 00@11 25 |
| Southern coke No. 2.....     | 10 25@10 75   |
| Southern coke No. 3.....     | 9 75@10 00    |
| Southern gray forge.....     | 9 50@9 75     |
| Southern charcoal No. 1..... | 14 00@14 50   |
| Missouri charcoal No. 1..... | 13 00@13 50   |
| Ohio softeners.....          | 14 00@14 50   |
| Lake Superior car-wheel..... | 16 50@17 00   |
| Southern car-wheel.....      | 16 75@17 25   |

We quote for cash delivered Boston:

|   |               |
|---|---------------|
| Alabama No. 1 foundry.....                | \$12 50@12 75 |
| Alabama No. 2 foundry and No. 1 soft..... | 11 50@11 75   |
| Alabama No. 3 foundry and No. 2 soft..... | 11 00@11 25   |
| Alabama No. C. C. car-wheel.....          | 18 50@19 00   |
| Strong L. S. coke iron No. 1 foundry..... | 14 00@14 50   |
| Lake Superior charcoal car-wheel.....     | 17 00@17 50   |
| American-Scotch (Northern) No. 1.....     | 14 00@14 50   |

NEW YORK, July 14.

We are passing through a very dull season, strikes and labor difficulties generally giving a spirit of unrest and uncertainty to all lines of manufacture and enterprise. Consumption is at the lowest point, and there is not much to encourage as to the outlook at this writing.

We quote for cash f. o. b. New York:

|                                       |               |
|---------------------------------------|---------------|
| No. 1 foundry lake ore coke iron..... | \$13 50@14 00 |
| No. 2 foundry lake ore coke iron..... | 12 50@13 00   |
| No. 1 American-Scotch.....            | 13 50@14 00   |
| No. 2 American-Scotch.....            | 13 00@13 50   |
| No. 1 standard Southern.....          | 11 50@12 00   |
| No. 2 standard Southern.....          | 11 00@11 50   |
| No. 1 standard Southern soft.....     | 11 00@11 50   |
| Standard Southern car-wheel.....      | 18 25@18 75   |

PHILADELPHIA, July 14.

It now looks as though more changes will be made in the tariff bill, making it as originally proposed, nearer the free-trade business. This means dull times and uncertainty ahead of us, such as we witnessed in midsummer a year ago. Pig iron is in demand, purchases being made

in small lots for early requirements. Spot Bessemer is selling at \$12.50 cash Pittsburg. One offer of \$11.50 for 30,000 tons, August and September delivery, was declined, although some has been sold at \$11.75 cash Pittsburg for delivery after strike is over. This means that there will be little if any decline in steel.

We quote for cash f. o. b. Philadelphia docks:

|  |               |
|--|---------------|
| Standard Alabama No. 1 X.....          | \$11 50@12 00 |
| Standard Alabama No. 2 X.....          | 10 50@11 00   |
| Strong lake ore coke iron No. 1 X..... | 13 50@14 00   |
| Strong lake ore coke iron No. 2 X..... | 12 50@13 00   |
| Lake Superior charcoal.....            | 15 00@15 25   |
| Standard Alabama C. C. W.....          | 18 00@18 50   |

ROGERS, BROWN & CO.

### Industrial Development.

The recent discovery of a rich vein of high-grade manganese ore at White Sulphur and the highly-satisfactory result of the thorough tests to which it has been put will again direct attention to the known mineral wealth of this section, as well as to that which is as yet largely suppositious. Ever since the discovery of the Crimora manganese bed in this county the Virginias have been looked upon as the most promising field in the Union, if not in the world, for the production of this valuable mineral. Most of the prospecting has been of a desultory, hap-hazard nature, and as a result but few important discoveries have as yet been announced, the one at White Sulphur being probably the most valuable since the opening of the Crimora mines. Within the past few months, however, more systematic efforts have been made in various portions of this and adjoining counties which have resulted in the opening up of deposits which show by analysis that they are of the highest grade, and should further investigation, now in progress, confirm the claims made as to the extent of the deposits, Augusta will soon resume the position of the world's largest producer of manganese ore. It is claimed by some scientists that no great body of manganese has yet been discovered; that the beds that have been worked are simply outcroppings or washings from the main body, and that eventually it will be discovered, and will be found to be practically free from the impurities which as a rule are found in the smaller deposits.

If this reasoning be correct, and we see no reason to dispute it, then it logically follows that since this section is so prolific of the small deposits, the main body cannot be far away and must sooner or later be discovered. Meantime there is ample room for industrial development along other lines which should not be overlooked in what may be a futile effort to locate a profitable ore deposit. We are today importing from distant points lumber, building stone, wagons, farm machinery and numerous other supplies, all of which can and should be produced in our own county. The axiom that it is not what one earns, but what he saves, that creates wealth, applies even more forcibly to communities than to individuals, and every dollar we send away to pay for materials or implements we can produce at home increases by just that amount the poverty of our own people. Isn't it about time to stop sending the greater portion of our earnings to Northern and Western manufacturers, and put a little of it into circulation among our own people? Until this is done we can never expect prosperity, though our undeveloped wealth mean tenfold what it is.—Staunton (Va.) News.

THE first-mortgage bondholders of the Dallas (Texas) Consolidated Street Railway Co. have taken steps to foreclose the mortgage. A committee of bondholders in Baltimore composed of John Gill, William H. Blackford and J. Willcox Brown have the matter in charge. The company operates twenty-six miles of track. The first mortgage amounts to \$250,000 and the second mortgage is \$500,000.

### New Books.

AMERICAN STREET-RAILWAY INVESTMENTS. Street Railway Publishing Co., 26 Cortlandt street, New York. 216 pages, including twenty-four maps; cloth. Price \$5.00.

There has been gathered together in this book a vast amount of details relative to the street railways of the country. The information is of a very practical character, and is arranged for quick reference. The remarkable development in the building of street railways has brought such securities into greater popularity, and this compilation of the capitalization and other statistics of such properties is a timely one. It presents authentic information of value to the investor, giving one a very full acquaintance with the condition and operations of any particular line, and will prove a helpful aid to legitimate investments.

HENDRICKS' ARCHITECTS' AND BUILDERS' GUIDE AND CONTRACTORS' DIRECTORY OF AMERICA. S. E. Hendricks Co., 61 Beekman street, New York city. Price \$5.00.

This is a useful register of all those interested in the construction industries of the country, containing over 170,000 names, addresses and business classifications. It comprises builders and contractors of material and construction in the building and kindred industries. Lists are given of the manufacturers of and dealers in everything employed in the manufacture of material and apparatus used in these industries from the raw material to the manufactured article, and from the producer to the consumer. The book contains over 700 pages, and evidences great labor and care in its preparation.

THE MINERAL INDUSTRY, Its Statistics, Technology and Trade, from the Earliest Times to the Close of 1893. Price \$5.00. Scientific Publishing Co., New York.

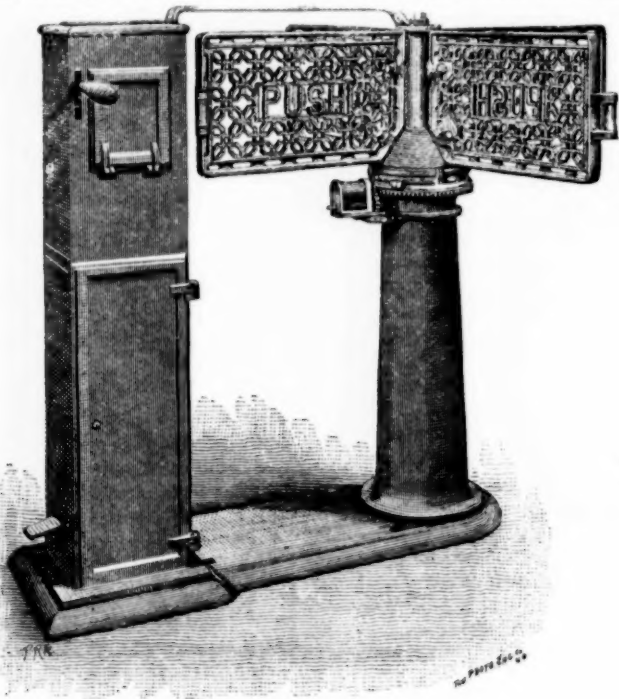
This is an up-to-date treatise on mining, metallurgy, markets and uses of the commercial minerals and metals. It describes the occurrence and character of deposits in which the useful minerals are found, the characteristics of the mineral, methods of mining treatment, characteristics of metal or other products, itemized costs, uses, statistics of production, imports and exports, consumption total and per capita, review of mineral, metal and mining stock markets. Competent authorities present invaluable articles upon the recent progress in each department of mining, metallurgy and the chemical industry. The book is the annual statistical supplement of the Engineering and Mining Journal. It is one of the few works of a technical nature that the lay reader can peruse understandingly. There is a clearness and compactness in the arrangement of the vast array of facts that makes the book at once a popular authority. In its preparation there is evidenced a great amount of labor. A high standard of accuracy is maintained in every department. In scope it takes in the whole field in a thorough and satisfactory manner. The personnel of its editors, embracing men well qualified by exceptional ability and opportunities to speak authoritatively, makes the work unique in its importance and value. Such a book has an unlimited field of usefulness. One can turn to its pages with confidence that what is wanted can be readily found stamped with the essential feature of reliability. It is a storehouse of knowledge that requires no professional or technical qualifications to become acquainted with its contents. To anyone interested in minerals or their development, to the seeker after knowledge in this especial field, or to the engineer who aims to possess accurate and complete information of the mineral industry, this book will be an invaluable companion. Mr. Richard P. Rothwell, under whose supervision the work is published, and his associates are to be congratulated on the highly creditable result of their labors.



## MECHANICAL.

## The Columbian Gate.

An interesting study at the World's Fair was to note the exactness with which the vast throngs were counted as they entered the exposition grounds. Over 28,000,000 admissions were recorded. These were counted by a unique gate without mishap or discomfort, its duty being performed automatically with greater satisfaction and



THE COLUMBIAN GATE.

perfection than any human agent could have done. The Columbian gate, as it is called, is illustrated herewith. It was a feature and a fixture of the fair—an attractive exhibit which was examined and watched with much interest.

The selection of a contrivance for rapid ingress of great crowds was a difficult problem to the exposition officials. A spirited competition between inventors and manufacturers was caused by the demand. After close scrutiny of all gates presented the one shown on this page was selected for its advantages in efficiency, serviceability and workmanship. There were some 350 of these gates erected on the fair grounds, and as soon as the gates were closed but a few minutes were required to obtain the number of admissions for the day. The Caspar Automatic Patent Co., Limited, of New Orleans, La., is the manufacturer of these gates.

Two gates are manufactured by this company—one, an automatic coin gate, and the other the ticket gate used at the World's Columbian Exposition. The gates are built of iron, brass and steel, are light, but thoroughly substantial, durable, trim and attractive. The register with which they are equipped is claimed to be the most perfect, the most accurate and the most reliable of any manufactured in Europe or America.

It was continually used at Chicago, and, we are informed, was never reported out of gear, never failed to work, and was in as good condition at the close of the exposition as at any time during which the fair lasted. With proper care the gate will last a long term of years, and is so simple in construction and so few in parts as to be repairable quickly and with insignificant cost. The outward appearance of either gate is the same. The register is on the cylinder or stile of the gate, where the four wings centre. It is visible, yet to tamper with it would be not only a very difficult matter, but would call into play all the skill of a trained mechanic. At the side of the gate there is a square column constructed of iron, hollow, and containing

the ingenious mechanism operating the gate and a receptacle for coins or tickets, according to the character of the gate. At the top of the column there is a slot in which the coins or tickets are dropped. The mechanism of the gate is adaptable to the use of coins varying in size from a copper cent to a silver dollar. Where the coin gate is preferred, the mere dropping of the coin into the slot unlocks the gate and admits of a quarter revolution of the stile. The gate relocks itself and is immovable

until another coin is slipped into the aperture. The register records each movement of the wheel, and the number of registered movements of the wheel must necessarily correspond with the number of coins in the receptacle. The impossibility of tampering with the returns of admissions is self-evident. The presence of an attendant at the gate is necessary only to guarantee the use of legitimate coins, and, that being all, the position is one of limited responsibility. The key to the column holding the coins may be kept in the treasurer's office of any corporation using the gate, and, with the register, a perfect and reliable check on admissions thereby becomes at all times certain.

The ticket gate, which was the one in

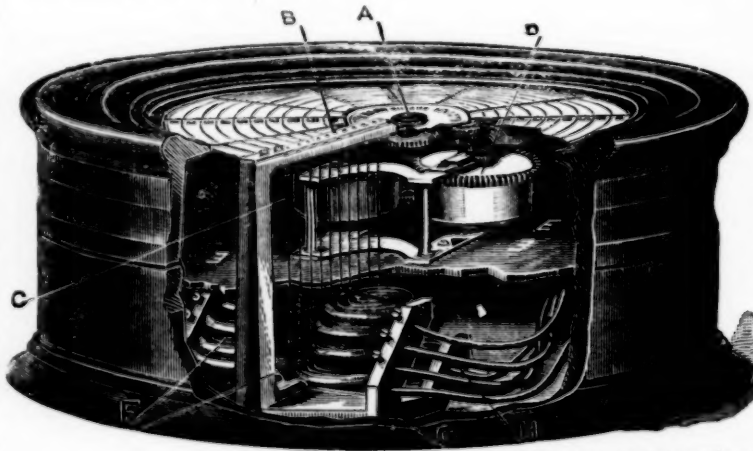


FIG. 1.

PNEUMATIC WATCHMAN'S CHECK.

use at the exposition, is not less simple, effective, practicable and trustworthy than the coin gate. In the latter a hand or foot lever is provided to be operated by the attendant in unlocking the gate. The passenger or fair visitor or whosoever finds it necessary to use the gate enters the wings and drops his ticket into the slot, whereupon the attendant presses the lever, the lock is opened, the gate turns and the admission is registered. This gate, in the simplicity of its construction, rapidity and

effectiveness of work, commends itself to the careful and thoughtful consideration of corporations which handle crowds. For use at railroad depots, ferries, base-ball parks, sporting grounds, State and county fairs, museums, theatres, etc., where it is desired to facilitate the movement of extraordinary assemblages, avoid crushes and jams, and yet keep a record of admissions to serve as check upon employees, these gates possess especial advantages. Further details may be obtained by addressing the manufacturer.

## Pneumatic Watchman Check.

The utility of a reliable check on a watchman has opened up a wide field for such devices. For the protection of business houses a watchman is essential, and for keeping the watchman constantly on the alert a mechanical check is desirable.

The Pneumatic Watchman Check Co., of Columbus, Ohio, conceived the idea of operating a watchman check by air. Fig. 1 of the two accompanying illustrations shows the recorder with a section of it removed so that the internal arrangement of the device is made plain. A is the dial-holder; B, the guide-arm for dial; C, the puncturing needles; D, the clock movement; E, deck; F, diaphragms or air-chambers; G, base and diaphragm-holder; H, tubes leading to stations. The paper dial is placed on the hour post of an eight-day duplex-movement brass-clock works, and is held in place by dial-holder.

There is a slot in the guide-arm through which the paper dial also moves, and which holds the dial in place while being punctured by the needles, which are attached to the diaphragms, or thin-faced metal air-chambers, made of spring sheet German silver two-thousandths of an inch thick. The small circular corrugations in the metal permit these air-chambers to expand slightly when pressure is transmitted into them through the connecting lead tubes extending from the diaphragms to the different stations throughout the building. This pressure is obtained by inserting a split key into the cast-iron station and pushing it lightly, which forces the air from the end of the tubing con-

necting with the station clear along through the lead tubing until the air pressure reaches the German-silver diaphragm, inflating it, causing a needle attached to the diaphragm to operate upward, thus puncturing the paper dial in the circle, which is numbered the same as the station is numbered, and, with the hours of the day marked on the paper dial by radial lines, it may be determined at once at what time the record from any particular station was made. Each station has a

separate line of tubing extending from it to the recorder, and a separate diaphragm and needle having the same number as the station is numbered. The diaphragms have a very small hole in them, hardly discernible to the naked eye, to equalize the air pressure on account of expansion or contraction by changes of temperature. This also, it is stated, renders it impossible to hold the needle in the paper dial a sufficient length of time to destroy the dial by its turning while the needle remains in the paper, which is sometimes done by malicious watchmen, who then claim that the machine is out of order. The small hole allows the air to escape, and the needle then drops back to its normal position, it being impossible to hold it through the paper dial longer than from five to eight seconds.

Fig. 2 shows a station in operation. The lead tubing as it extends from the station to the recorder is thoroughly protected from damage by stamped-steel molding. Any number of stations up to and including fifty are made to record on a single dial. A small one-station check is made that is largely used by private patrol companies for residences, banks and storerooms where merchant police only are employed. A square-shaped recorder is also made, highly polished and particularly ornamental.

Some of the points of advantage claimed for the pneumatic watchman check are: It is so simple that it is almost impossible to get out of order; there are no batteries, insulated wires or complicated mechanisms; there is no expense keeping it up; any mechanic can place it in position for operation; all parts are interchangeable, and may be replaced without the assistance of an expert should unavoidable accident render this necessary.

This check is now being placed on the market by the Pneumatic Watchman Check Co., of Columbus, Ohio, and further information will be furnished on application.

## Wise Men

read the advertising pages of the MANUFACTURERS' RECORD carefully because they are always sure to find something of value; it may be a special sale, or an opportunity

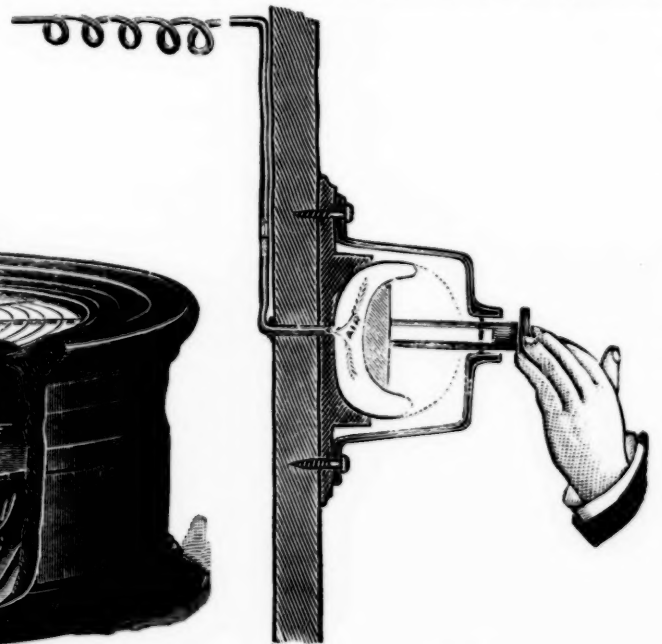


FIG. 2.

for investment, or some new machinery, or some one looking for a location for a factory, or a thousand and one things advertised that may concern you. Every man ought to study newspapers, not simply glance over them, but examine in detail the MANUFACTURERS' RECORD, for instance, and he will be sure to find something that can be made profitable in his business. In its news columns and in its advertising pages he will find matter that may prove invaluable in his business operations.



# CONSTRUCTION DEPARTMENT.

**WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad under construction, and every mining company organized. This information is always fresh and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

\*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

**Ball Flat—Stave Mill.**—The Thomas Stave Co. has built a mill to produce 10,000 white-oak staves daily, employing fifty to sixty men.\*

**Ball Flat—Saw Mill.**—Mr. Coby has erected near Ball Flat a mill for sawing hardwood.

**Northport—Marble Works.**—J. T. Gaudin and W. A. Stinson will put marble works in operation.

## FLORIDA.

**Chipley—Saw Mill.**—The Hutton-Taylor Mill Co. has been organized at Pensacola with a capital stock of \$10,000 to operate a saw mill near Chipley. Hugh B. Hutton is president; Edgar Taylor, vice-president, and John F. Collins, secretary.

**Jacksonville—Canning Plant.**—L. R. Benjamin has organized the Tropical Canning Co. to establish a plant; capital stock is to be \$10,000. Mr. Benjamin is president and general manager, and Chas. H. Moulton, secretary and treasurer.

**Key West—Cigar Factory.**—Edgar Falk & Co. will start a cigar factory.

**Mascotte—Kaolin Mines.**—G. C. Stevens and a Mr. Robins, of Jacksonville, are interested in prospective kaolin developments near Mascotte.

**Middleburg—Phosphate Plant.**—The Black River Phosphate Co. is overhauling its plant.

**Ocala—Phosphate Mines, etc.**—William S. Trimble, of Hogansville, Ga.; James M. Graham, of Gainesville, Fla., and Edward Holder, of Cincinnati, Ohio, have incorporated the Associated Phosphate Co. to mine phosphate, erect works, etc. The capital stock is \$100,000; place of business, Ocala.

**Raymond—Lumber Mills.**—The Raymond Lumber Co. has been incorporated for the purpose of conducting a lumber business with a capital stock of \$15,000. Cyrus Raymond is president; Herschel P. Walker, vice president, and Peter M. Osborn, secretary.

**Tampa—Ice Factory.**—The Tampa Ice Co. will enlarge its factory buildings and put in a 15 ton plant, already secured.

**Tampa—Bridge, Sewerage, etc.**—The citizens held an election on the 14th inst. and voted an issuance of \$350,000 of bonds for a sewerage system and bridge. Address the mayor.

**White City (P. O. Ankona)—Brick Works.**—It is said that brick works will be built.

## GEORGIA.

**Athens—Foundry and Machine Works.**—Lamar Lyndon has purchased Thos. Bailey's foundry and machine works.

**Atlanta—Telephone Line.**—The Southern Bell Telephone Co. has commenced the construction of a line to Macon.

**Dahlonega—Gold Mines.**—Jos. Clemens, J. F. Moore and D. T. Harris are developing a gold mine.

**La Fayette—Cotton Mill.**—The Union Cotton Mills will in the near future put in machines for weaving fine sheeting or toweling.

**Fairburn—Harness Factory.**—McCurry, Inman & Co. are putting an engine in their harness factory.

**Lexington—Granite Quarries.**—The Lexington Blue Granite Co. has put its quarries in operation again, employing twenty-five men.

**Macon—Manufacturing Drugs, etc.**—H. J. Lamar, H. J. Lamar, Jr., and W. D. Lamar have applied for the incorporation of the H. J. Lamar & Sons

Drug Co. with a capital stock of \$60,000. Their purpose is to manufacture and deal in drugs.

**Madison—Knitting Mill.**—A movement is afoot for the establishment of a knitting mill. Captain Becker, of Snapping Shoals, is interested.

**Newnan—Oil Mills, etc.**—The Robert McBride Co. has been chartered for the purpose of manufacturing cottonseed oil, fertilizers, ice, etc. The incorporators are W. C. McBride, Jr., of Newnan; Wm. C. McBride, Sr., of Colorado; Mrs. M. J. McBride, of New York, and others; capital stock placed at \$25,000.

**Savannah—Soap Factory.**—The Diamond Dust Soap Powder Co. has been chartered to manufacture soap, soap powder, etc., with a capital stock placed at \$15,000, fully paid in. D. H. Green, Herbert T. Moore, Wm. D. Champion and L. W. Nelson are the incorporators.

## KENTUCKY.

**Cadiz—Water Works.**—The city is figuring on the construction of a water-works system. Address John F. White.\*

**Danville—Telephone System.**—Endeavors are being made for the organization of a company to construct a telephone system.

**Louisville—Stone Quarries.**—Thomas Walsh, of Chicago, Ill., has purchased the Bedford stone quarries from W. L. Breyfogle, assignee, for \$7700.

**Milledgeville—Creamery.**—J. B. Myers and N. J. Cone have started a creamery.

## LOUISIANA.

**Crowley—Electric-light Plant and Water Works.**—Water works and electric-light plant will be built. O. H. Landreth will make surveys.

**Plaquemine—Mercantile, Manufacturing, etc.**—Altemus Bros., Limited, have incorporated to transact a mercantile business, manufacture brick, etc. Ernest Altemus is president; Jacob W. Altemus, vice-president, and David Altemus, secretary-treasurer; capital stock \$35,000.

## MARYLAND.

**Baltimore—Electrical Works.**—The Viaduct Manufacturing Co., whose plant was burned at Relay, has made arrangements to resume operations at once, manufacturing electrical goods.

**Baltimore—Commercial.**—Geo. W. Gail, Ernst Schmeisser, Henry G. Hilken, John Hinrichs and Geo. W. Gail, Jr., have incorporated the Hinrichs Export Co. to conduct a general commercial business. The capital stock is \$25,000.

**Baltimore—Land, etc.**—Wm. M. Brown, Chas. R. Evans, David C. Sutherland and others have incorporated the G. V. M. Stock Co. to buy and sell land; capital stock \$2500.

**Belair—Telephone System.**—The Belair Telephone Co. expects to establish a telephone system. Organization has been effected with Henry Haynes as secretary and manager.\*

**Havre de Grace—Coal Shute.**—C. C. Pusey & Co. are erecting a coal shute.

**Lonaconing—Coal Mine.**—The American Coal Co. intends to make two new openings on its property, and is asking for bids.

**Lonaconing—Coal Mines.**—The George's Creek Coal & Iron Co. has reopened the Coney mine, which has been idle for a year.

**Sparrow's Point—Lumber Mills.**—The Williamsport & Chesapeake Lumber Co. will put its mills in operation to saw the logs brought down the Chesapeake bay by the June freshet. It is estimated that 275 men will be employed a year and a-half on the work.

**Washington, D. C.—Ice Manufacturing, etc.**—The N. Auth Manufacturing Co. has been incorporated to manufacture ice, etc. John H. Ruppert is president and treasurer; Sustus Auth, vice president, and Nicholas Auth, secretary; capital stock \$100,000.

## MISSISSIPPI.

**Biloxi—Ice Plant.**—The Biloxi Ice Co. will increase the capacity of its plant, having contracted for a new machine of fifteen tons capacity.

**Glade—Lumber Mill.**—Mills & Lambert are putting in considerable new machinery, including dry-kiln, conveyor, engine and boiler, planer, etc.

**Toomsaba—Grist Mill and Gin.**—A. J. Kuton will rebuild his cotton gin and grist mill recently burned.\*

## MISSOURI.

**St. Louis—Lumber, etc.**—C. F. Leibe, W. R. Chivvis and W. H. Thomas are the incorporators of the C. F. Leibe Hardwood Mill & Lumber Co., already noted.

## NORTH CAROLINA.

**Burlington—Cotton Mill.**—The Glencoe Cotton Mills is improving its plant, and may put in more spindles.

**Carthage—Gold Mine.**—The Pinch Back Gold Mining Co. has been organized to develop a gold

mine. A 10-stamp mill will be built. Sandy Tyson is president, and J. F. Burns, secretary-treasurer.

**Davidson—Cotton Mill.**—The Linden Manufacturing Co. will put in carding machinery, and contemplates putting in more looms and spindles.\*

**Egypt Depot—Coal Mines.**—The Egypt Coal Co. has resumed work at its bituminous coal mines in Chatham county after a suspension of nearly a year. The mines will shortly be in full operation. Hoisting plant of 1000 tons daily capacity has lately been completed and other machinery added. Two shafts, 8x15 and 8x12, respectively, are now in operation, and the sinking of a third shaft is now in contemplation.

**Hamilton—Lumber-mill Plant.**—Frank Hitch expects to build this fall a saw-mill plant of two band saws and a gang saw.\*

**Monroe—Flour Mill.**—Austin & Stewart are remodeling their flour mill in Goose Creek township.

**Raleigh—Publishing.**—J. N. Holding has purchased the News-Observer from the receiver for \$6800.

**Salisbury—Telephone System.**—J. A. Brown and E. B. Neave, noted last week as obtaining franchise to construct telephone line, will organize the Salisbury Telephone Co. to operate same.\*

**Scotland Neck—Electric, Ice and Oil Plants.**—S. F. Dunn and G. W. Coughenour have purchased the W. H. Kitchen lumber mill for \$6000, and will soon build an ice factory, electric-light plant and oil mill.

**Wallburg—Lumber Plant.**—G. W. & C. M. Wall are enlarging their saw and planing mill and putting in new machinery.

## SOUTH CAROLINA.

**Cheraw—Gold Mines.**—E. Motz and associates are making preparations to open the Kirkley gold mine. Mr. Motz lately purchased the Brown gold mine, and intends to develop that also.

## TENNESSEE.

**Bristol—Artesian Well.**—The Dixie Tannery Co. is sinking an artesian well.

**Bristol—Collar and Shirt Factory.**—The Bristol Shirt & Collar Manufacturing Co. has been organized for the purpose of engaging in the manufacture of shirts, collars and cuffs; H. C. Wood is president; J. Wilder, general manager, and the capital stock is placed at \$25,000. New buildings will be erected and plant installed to employ fifty operatives at the start.\*

**Columbia—Phosphate Mines.**—The Tennessee Phosphate Co. will develop mines. C. P. Paine, of Baltimore, Md., is president; Percy B. McLaran, of Baltimore, vice-president, and H. I. Arnold, secretary.

**East Chattanooga—Iron Works.**—The Southern Queen Manufacturing Co. has enlarged its sad-iron plant, putting in a large number of new machines. Orders for the goods are plentiful.

**Jackson—Furniture Factory.**—R. W. Martin, F. L. Ingersoll, F. J. Clemens and T. E. Lindsey have organized the Southern Seating & Cabinet Co. and leased the Jackson Office Furniture Co.'s factory. Operations will be resumed at once.

**Jackson—Publishing.**—The Blade Publishing Co. has been organized to publish an evening newspaper. Robert Gates is president, and J. G. Ciser, secretary and treasurer.

**Jackson—Shirt Factory.**—Marks Bros. have organized a company with a capital stock of \$5000 to engage in the manufacture of shirts, overalls and drawers. E. W. Valentine, late of New York, will manage the plant. Thirty hands will be employed at the start.

**Jackson—Mattress Factory.**—Mr. Delp will start a mattress factory.

**Knoxville—Rolling Mills.**—The Knoxville Iron Co.'s rolling mills have resumed work after a few weeks' idleness. Between 150 and 200 men are at work.

**Nashville—Phosphate Plant.**—G. M. Fogg, V. L. Kirkman, J. H. Bruce, H. B. Buckner and J. F. Ward have incorporated the Duck River Phosphate Co.

**Sparta—Paper Mill.**—J. R. Tuff and others will establish a wood-pulp paper mill of about six tons daily capacity. News, book and manilla wrapping paper will be made and forty hands employed.

**Springfield—Water Works.**—The construction of water works is talked of. E. A. Hicks can be addressed.

**Winchester—Canning Factory.**—A plan is talked of for the organization of a co-operative company to establish a cannery, operate vegetable farm, etc. J. L. Gorton is interested.

**Winchester—Coal Mine.**—B. G. Slaughter has let contract for the opening and development of a coal mine near Winchester.

**Winchester—Electric-light Plant.**—Brace Bros. & McNair Co., of Chicago, have contracted to erect an electric plant for lighting Decherd and Winchester.

**Winchester—Fibre Plant.**—The Wood Fibre Co., of Wellsville, Ohio, contemplates removing its plant to Winchester.

## TEXAS.

**Austin—Novelty Works.**—The factory noted during the week as to be started by F. H. Jones will operate as the F. H. Jones Manufacturing Co., producing springs, mattresses, cots, window poles, tables, safes, etc.\*

**Oak Cliff—Water Works.**—The city council has passed an ordinance issuing \$10,000 in bonds for improving the water works, which have been leased to the Oak Cliff Water Co. The latter will also expend \$10,000 in improvements.

**San Antonio—Manufacturing.**—J. R. Hooper, John Roessle and W. E. Oglesby have incorporated the Roessle Manufacturing Co. with a capital stock of \$10,000.

**Waco—Cotton Mill.**—A \$2,500,000 syndicate may erect a cotton mill in Waco if sufficient inducements are offered. J. Hansel Wood can be addressed.

## VIRGINIA.

**Alexandria—Coal Mining, etc.**—The Allegheny Co. has been granted a charter for the purpose of mining and dealing in coal, etc. T. R. Martin is president, and J. M. Burrell, secretary-treasurer, both of Washington, D. C.; capital stock \$25,000.

**Broadway—Brick Works.**—G. W. Lambert, late of Richmond, has purchased clay lands near Broadway and will establish brick works.\*

**Mineral City—Pyrites Mines.**—The Arminius pyrites mines, lately noted, are owned by the Arminius Chemical Co.; Rowland F. Hill, of 18 Wall street, New York, president; J. F. Kernochan, of 44 Pine street, New York, vice-president; Will Man, of 56 Wall street, New York, secretary-treasurer, and W. H. Adams, of Mineral City, general manager. Further developments are proposed for the near future.

**Richmond—Mercantile, etc.**—Chas. B. Fitzwilson, Chas. W. Dunston, Ernest Kahl and others have incorporated the People's Purchasing Agency to conduct a factors' and commission-merchants' business; capital stock \$10,000.

**Richmond—Electric-light Plant.**—A resolution has been introduced in the city council appropriating \$100,000 for the erection of an electric-light plant. Address the mayor.

**Vinton—Zinc Deposits.**—Peter McKee has discovered zinc deposits on his farm, near Vinton.

## WEST VIRGINIA.

**Charleston—Water-power Electric Plant.**—A charter has been granted to the Great Kanawha Water-Power Electrical, Manufacturing & Land Co. for the purpose of utilizing the water-power of the Great Kanawha falls for the manufacture of electric power; authorized capital \$2,000,000. The incorporators are Oliver A. Patton, W. W. Tompkins, W. D. Scott, M. Levi and T. F. Snyder, of Charleston; Chas. M. Reeder, of Baltimore, Md., and Alex. McClintic, Lexington, Ky.

**Elk City—Ice Plant, etc.**—There is talk of an ice plant and iron foundry being erected. G. H. Holliday, of Ironton, Ohio, is interested.

**Gauley Bridge—Lumber Mills, etc.**—R. O. Smith, of Columbus, Ohio, and N. O. Haywood, of Cleveland, Ohio, have organized the Green Lumber Co. and purchased a 30,000-acre tract of timber land on the Gauley river. Three circular-saw mills of about 60,000 feet daily capacity will be put in.

**Huntington—Transfer Company.**—A charter has been granted to the Huntington Transfer Co. with a capital stock of \$100,000.

**Huntington—Book Bindery.**—Frank A. Miller has established a bindery.

**Keyser—Electric-light Plant.**—The electric light company has been formally organized as the Keyser Electric Light Co. and will erect a plant at once. Incorporation papers have been obtained; capital stock \$50,000. Estimates from manufacturers are being asked. J. H. Vernon, F. P. Whitmer, T. B. Davis and others are interested.\*

**Parkersburg—Publishing.**—The State Journal Co. has been chartered with a capital stock of \$100,000.

**Piedmont—Bridge.**—Mineral county, W. Va., and Allegany county, Md., have decided to construct a bridge across the Potomac river. Address the county clerk.

**Sistersville—Implement Works.**—The Leidecker Tool Co., of Marietta, Ohio, has proposed to remove its works to Sistersville.

## BURNED.

**Campbellsville, Ky.**—Newton Bros.' brick block, Border's Hotel and other buildings; loss \$30,000.

**Charleston, W. Va.**—The Tanners & Dyers' Ex-



tract Co.'s factory, near Charleston; loss over \$150,000.

**Clear Run, N. C.**—A. J. Johnson's turpentine distillery.

## BUILDING NOTES.

**Alexandria, Va.**—Dwellings.—Charles King has let contract to J. T. Rogers for the erection of two dwellings.

**Annapolis, Md.**—Church.—The erection of a new church building is contemplated by the congregation of Wesley chapel. Address the pastor.

**Atlanta, Ga.**—Auditorium.—The Chautauqua Association contemplates erecting a large auditorium. F. B. Shepherd can be addressed.

**Baltimore, Md.**—Hall.—E. G. Rupp will at once rebuild the hall building lately burned. Over \$12,000 will be expended.

**Baltimore, Md.**—Stable.—Samuel A. Rice will build a four story stable and three-story carriage house, 150x40 feet, to cost \$20,000. Henry Thurman prepared the plans.

**Bowie, Texas.**—School.—The erection of a \$6500 schoolhouse is talked of. Address the mayor.

**Chattanooga, Tenn.**—Hall Building.—Mr. Perkins has let contract for the erection of a \$6000 convention hall to adjoin Lookout Inn.

**Columbia, S. C.**—School.—Plans have been completed for the new high-school building. Address the mayor.

**Columbus, Ga.**—Church.—The First Baptist Church will expend \$10,000 on its building.

**Dublin, Ga.**—Store.—L. B. Lanier is erecting a brick store.

**Havre de Grace, Md.**—Warehouse.—C. C. Pusey & Co. are erecting a warehouse.

**Little Rock, Ark.**—Business Block.—M. M. Rose will erect a brick business block 100x90 feet.

**Louisville, Ky.**—Church.—Architects are invited to submit plans for the new building to be erected by St. Paul's P. E. Church. Address A. E. Richards for circulars.

**Meridian, Miss.**—Public Building.—Bids are to be opened August 14 for the erection of the United States postoffice building. Address Jeremiah O'Rourke, supervising architect. See advertisement in MANUFACTURERS' RECORD of July 20.

**Mt. Sterling, Ky.**—Public Building.—The House committee on public buildings has favorably reported a bill to appropriate \$50,000 for the erection of a government building at Mt. Sterling.

**New Orleans, La.**—Public Building.—The House committee on public buildings has favorably reported a bill for appropriating \$400,000 to erect postoffice building at New Orleans.

**New Orleans, La.**—Club Building.—R. E. Rivers has obtained permit for the proposed improvements to the Pickwick Club buildings; \$30,000 are to be expended.

**New Orleans, La.**—Depot.—The East Louisiana Railroad Co. expects to erect a new passenger depot.

**New Orleans, La.**—Hotel.—The Grunewald Hotel will be enlarged at an expenditure of \$35,000. Theo. Grunewald is manager.

**Richmond, Va.**—Jail.—The city contemplates erecting a new jail. Address the mayor.

**Rock Hill, S. C.**—School Building.—The Colored Methodist Conference will erect a school building. L. M. Davis and W. L. Roddey have donated the site.

**Washington, D. C.**—Dwellings, etc.—Charles Ruoff has let contract to W. C. Morrison at \$6000 for the erection of a dwelling. N. T. Haller has plans for three three-story dwellings to cost \$18,000.

**Washington, D. C.**—Dwellings, etc.—Building permits have been granted to Eva S. Johnson for a brick dwelling and store three stories high, 20x75 feet, to cost \$5000; to W. G. Johnson for a three-story dwelling, 22x70 feet, to cost \$12,000; to W. C. Somerville, agent, for a brick armory four stories high, 122x147 feet, to cost \$60,000; to A. M. Cowell for a three-story brick dwelling to cost \$4500, and to C. B. Keferstein for eight brick dwellings to cost \$18,000; architects and builders engaged.

**Washington, D. C.**—Store.—Wm. B. Jackson will expend \$3000 in repairing his store at 207 Seventh street N. W.

**Wheeling, W. Va.**—Business Block.—Contract for erecting the four-story business block on the site of the Pollock flour mills has been let to the Beltz-Flading Co.

## RAILROAD CONSTRUCTION.

### Railroads.

**Alexandria, Va.**—It is expected that work will soon begin on the Washington & Western Maryland Railroad. The road is projected from Alexandria, Va., to a connection with the Metropolitan Southern branch of the Baltimore & Ohio in Montgomery county, and will be about sixteen miles long. The Baltimore & Ohio Railroad Co. will build the line.

**Corsicana, Texas.**—Work will probably begin within the next two weeks on the Corsicana Southeastern Railroad. Some contracts are let and more will shortly be awarded. C. W. Cockendall can give particulars.

**Harmon, W. Va.**—The Dry Forks Railroad Co. has completed its road from Hendricks to Harmon, a distance of about twenty miles, and construction is in progress beyond Harmon. J. W. Moore, Jr., is engineer in charge of the construction.

**La Porte, Texas.**—The La Porte, Houston & Northern Railroad Co. is arranging to secure funds to build its road to Galveston bay, a distance of about nine miles. T. W. Lee is manager.

**New Orleans, La.**—The East Louisiana Railroad Co., which recently acquired the New Orleans & Spanish Fort Railroad, will reconstruct the road throughout. New engines and coaches will also be secured.

**Raymond, Fla.**—The Raymond Railroad Co. has been chartered by Cyrus Raymond, of Danbury, Conn., as president; Herschel P. Walker, of Auburndale, Fla., vice-president; Peter M. Osborn, of Danbury, Conn., secretary; W. C. Edmiston, of Auburndale, Fla., treasurer, and G. Bert Raymond, of Danbury, Conn., general manager. The company will build a railroad six miles long. The capital stock is \$20,000.

**Versailles, Mo.**—The extension of the Boonville & Versailles branch of the Missouri Pacific from Versailles to Springfield is proposed. L. V. Stephens, Jefferson City, Mo., can give information.

### Street Railways.

**Augusta, Ga.**—The Augusta Railway Co. will build an extension of about one-third of a mile.

**Danville, Va.**—The Danville Street Car Co., operating an electrical railroad, contemplates extending across the Dan river to Neopolis.

**Memphis, Tenn.**—It is expected that the Citizens' Street Railway Co. will secure the Raleigh Springs Railroad and operate it by electricity.

**Rome, Ga.**—The Rome Electric Street Railway has been purchased by John J. Seay and associates. The line will be improved and extended.

**Rutherfordton, N. C.**—J. B. Freeman and T. P. Horton are interested in the project to build an electrical railroad from Rutherfordton to Chimney Rock, a distance of seventeen miles.

**Washington, D. C.**—The Eckington & Soldiers' Home Railroad Co. has been granted permission by the District commissioners to build an extension to be operated by an underground trolley.

**Winchester, Tenn.**—Girton & Parmalee report that Bracey Bros. & McNair, of Chicago, Ill., have been awarded contract to build an electric railroad from Winchester to Decherd, Tenn., a distance of two and a-half miles. The road is to be built and equipped and turned over to the local company in sixty days from July 1.

## MACHINERY WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

**Bag Machinery.**—W. A. & J. P. Edwards, Graniteville, S. C., want information regarding machinery for manufacturing meal and flour bags. Reliable data on percentage of profit in manufacturing these goods will be appreciated.

**Boiler and Engine.**—The Thomas Stave Co., Ball Flat, Ala., will need a boiler and engine in about two months.

**Boilers.**—C. G. Memminger, Columbia, Tenn., wants to buy two seventy-five horse-power return tubular boilers and one thirty horse-power return tubular boiler.

**Boiler and Engine.**—A. J. Kuton, Toombsville, Miss., wants a boiler and engine.

**Broom Machinery.**—W. A. & J. P. Edwards, Graniteville, S. C., want information regarding machinery for the manufacture of brooms, whisk brushes, etc. Reliable data on percentage of profit in the manufacture of these goods will be appreciated.

**Canning Machinery.**—The Florida Development Co., Avon Park, Fla., contemplates buying canning machinery.

**Canning Machinery.**—The Tropical Canning Co., Jacksonville, Fla., wants outfit of first class machinery for canning; L. R. Benjamin, president.

**Carding Machinery.**—The Linden Manufacturing

Co., Davidson, N. C., is in the market for carding machinery.

**Clay crusher, etc.**—G. W. Lambert, Chester, Va., wants a good clay-crusher and disintegrator.

**Collar and Shirt Machinery.**—Machinery for manufacturing collars, cuffs and shirts will be purchased by the Bristol Shirt & Collar Manufacturing Co. Address J. Wilder, general manager.

**Conveying Machinery.**—The Boehmer Coal Co., 205 North Eighth street, St. Louis, Mo., expects to buy apparatus for transferring coal from and on railroad cars.

**Cotton Gins, Press, etc.**—A. J. Kuton, Toombsville, Miss., wants two gins, cottonseed-huller and a press.

**Decorticating Machinery.**—The Florida Development Co., Avon Park, Fla., contemplates buying machinery for extracting fibre from pineapple, sisal hemp and banana stalks.

**Electric-light Plant.**—The Keyser Electric Light Co. is ready to receive bids and information on electric-light plant. Address J. H. Vernon, Keyser, W. Va.

**Engine.**—Reuter & Mallory, 22 Light street, want to buy a second-hand upright engine 6x6; about six to eight horse-power.

**Engine.**—Hood & Berg, San Antonio, Texas, are in the market for a 200 horse-power second-hand engine, either Corliss or automatic.

**Engine.**—Frederick Fadum, 408 West German street, Baltimore, Md., wants a 25-horse-power horizontal engine.

**Engines.**—C. G. Memminger, Columbia, Tenn., wants to buy a forty horse-power engine and a twenty horse-power engine.

**Excelsior Machinery.**—F. H. Jones, 901 East Fourth street, Austin, Texas, will want excelsior machinery.

**Fire Apparatus.**—Manufacturers of fire apparatus might find it advantageous to correspond with the mayor of Winchester, Va.

**Fire Apparatus.**—Manufacturers of fire apparatus should correspond with the mayor of Denton, Md., as that city may buy equipment.

**Gas Engine.**—V. 10, Sun Office, Baltimore, Md., wants a second-hand White & Middleton gas engine of four horse-power.

**Grist Mill.**—A. J. Kuton, Toombsville, Miss., wants a grist mill.

**Hoisting Plant.**—The Farmers' Oil Mills, Tarboro, N. C., is in the market for a small engine and drum to draw loaded cars of 4000 pounds up a 60-degree incline (second-hand).

**Hosiery Machinery.**—J. R. Robertson, Jr., Pelzer, S. C., wants information on hosiery mill.

**Hosiery Machinery.**—S. Leibowitz, Jefferson, Texas, wants hosiery knitting machines.

**Hydraulic Jacks.**—K. B. Harvey, Punta Gorda, Fla., wants to buy four hydraulic or geared jacks of 20-ton power each.

**Ice Plant.**—The Florida Development Co., Avon Park, Fla., wants estimates on small ice plants.

**Ice Machine.**—J. W. Short, the Arlington, Cape Charles, Va., wants to correspond with parties having a 10 to 15 ton ice machine for sale.

**Locomotive.**—W. H. B., P. O. Box 40, Baltimore, Md., wants a standard-gage 25-ton engine; must be in first-class condition and pass master mechanic's inspection.

**Machinery Supplies, etc.**—The Brown Electric & Machinery Co., Little Rock, Ark., is in the market as agent for belting, lace leather, pressure gages, injectors, gage glasses, washers, valves, oil-cups, malleable iron, fittings, etc.

**Milling Machine, etc.**—W. P. Biddle & Bro., 110 Mabry street, Knoxville, Tenn., are in the market for milling machines and gear-cutter combined, either new or second-hand.

**Mining Machinery.**—J. B. Kendall, Washington, D. C., wants two or one four-compartment jig, plunger pattern preferred, and a 10-foot sectional screen, second-hand.

**Oil-mill Machinery.**—The Fairfield Oil & Fertilizer Co., Winstonsboro, S. C., wants to correspond with anyone who has for sale second-hand chilled rolls in good condition for cottonseed-oil mill of twenty-five to thirty tons capacity.

**Oil Tanks.**—McMillan Bros. & Co., Mobile, Ala., want portable oil tanks on wheels, one and two horse-power.

**Pump.**—The Farmers' Oil Mills, Tarboro, N. C., is in the market for a steam pump to handle without elevation sixty gallons of cottonseed oil per minute (second-hand).

**Quartz Mill.**—Van Horn & Son, 1005 East Cary street, Richmond, Va., wants a second-hand Huntington centrifugal roller quartz mill, either size three and a-half, five or six feet.

**Roofing.**—Frank Hitch, Hamilton, N. C., will use roofing.

**Sewing Machines.**—The Cuero Cotton Oil Co., Cuero, Texas, wants to buy a machine for sewing camels' hair press cloth.

**Spiral and Weaving Machines.**—F. H. Jones, 901 East Fourth street, Austin, Texas, will want spiral and weaving machines.

**Standpipe.**—Jno. F. White, Cadiz, Ky., wants to

correspond with manufacturers of boiler-iron standpipe.

**Starch Machinery.**—The Florida Development Co., Avon Park, Fla., contemplates buying machinery for making starch from cassava.

**Telephone Equipment.**—The Salisbury Telephone Co., Salisbury, N. C., wants lowest prices on telephone equipment complete, estimates on constructing line, etc. Address J. Allen Brown.

**Telephone Equipment.**—The Belair Telephone Co., Belair, Md., will buy telephone equipment; Henry Haynes, manager.

**Tobacco Machinery.**—W. P. Dobson & Co., Rockford, N. C., may want tobacco machinery later on.

**Water-works Supplies.**—The Annapolis Water Co., Annapolis, Md., is advertising for bids to be opened July 19 on furnishing pipe, valves, pumping engines, etc.; J. H. Iglehart, secretary.

**Woodworking Machinery.**—J. R. Robertson, Jr., Pendleton, S. C., wants information on spoke and handle machinery.

F. H. Jones, 901 East Fourth street, Austin, Texas, will want ticking, tufts, twine, binding, burlaps, etc.

Henry M. Sciple, of Bordertown, N. J., wants prices on 100 barrels of prime crude cottonseed oil per month and fifty barrels rosin per month delivered at New Orleans or New York.

The Bank of Reidsville, Reidsville, N. C., wants a banking counter.

## TRADE NOTES.

The Columbus Iron Works Co., of Columbus, Ga., has obtained contract to supply the Biloxi (Miss.) Ice Co. with a new 15 ton ice machine.

The new brick plant of G. W. Lambert at Broadway, Va., will be equipped with one of the soft-mud machines made by the Henry Martin Brick Machine Manufacturing Co., of Lancaster, Pa.

Mr. C. W. Asbrand, of Cleveland, Ohio, has made a large contract of stained glass work for the Pilgrim Congregational Church at Cleveland, Ohio; recently finished the Bolton Presbyterian Church at Cleveland, and has made contract for new Baptist church at Euclid, Ohio.

AFTER a thorough experiment in hulling the Russia sunflower seed, the ability of the "Climax" huller to do such work perfectly has been fully shown. The task was performed as readily and as satisfactorily as if it was cottonseed that was being hullled. George J. Fritz, of St. Louis, Mo., is the builder of this machine.

A NEW brick machine shop 75x250 feet has just been completed by the Hamilton Machine Co., Hamilton, Ohio, manufacturer of drill presses, grinding machinery, etc. The new shop is built and equipped in modern style, and will greatly augment the company's facilities. This enlargement evidences the demand for the company's product, and indicates that times of depression do not hinder the development of its business.

THE fleet of floating palaces which patrols Long Island sound has been augmented by the addition of a superb new steamer, the "City of Lowell," to the line of the Norwich & New York Transportation Co. This boat will ply between New York city and New London, Conn. It is 366 feet long, and has five decks. All appointments conducive to the fullest and most luxurious enjoyment of travel are to be found on this steamer.

THE Brown Electric & Machinery Co., of Little Rock, Ark., will install a stock of general machinery supplies, and is in the market for belting, lace leather, pressure gages, injectors, gage glasses, gage-glass washers, valves, oil-cups, malleable-iron fittings, and as they expect to do jobbing business, solicit prices and propositions from manufacturers. The company will act as manufacturer's agent for engines, boilers, saw-mill supplies, woodworking machinery, pulleys, shafting and pumps.

In the construction of frame residences the question of insulation is an important one to those who are desirous of building a home which will be as fire-proof as a frame building can be made, and the most comfortable both in summer and winter. In the selection of an insulation it is well, therefore, to select one which is not only fire-proof, but which is at the same time a good non-conductor of heat. To obtain the best results in fire-proofing it is considered essential that the material employed should fill the entire space between the studding, as these spaces form natural flues for the spread of fire from cellar to roof. It is also well when selecting an insulation to look for one which is light and clean to apply. Among the materials which have been used extensively in the past few years for this class of work, mineral wool appears to meet the requirements of an insulation for frame residences. From statistics and test it is known that its fusing point is about 2200° F., which would show



that it is fire-proof. It fills the entire space between studding, and is deemed one of the best non-conductors of heat known, saving, it is stated, its cost in fuel in a few years. It is also both sound-proof and vermin-proof.

A HIGHLY satisfactory condition of business, which may be accepted as another illustration of how hard times and labor troubles affect Southern industries, is reported by the Heffernan Stained Glass Works, of Lynchburg, Va. This is the way they put it: "All our orders and correspondence is based on cash transactions, and in no case is 'time' being asked for. The distress so prevalent at this time north of the line is in no manner apparent in our section or the section in which we trade, which is almost exclusively through the Southern States. Of our force, though many of them are 'union' men, not one word of dissatisfaction is expressed, nor any feeling manifested as being in sympathy with the labor troubles of the country—labor troubles being defined as the actions of the leaders, and not that of the misguided laborers. A happier or more contented people do not exist anywhere on this continent than the people of the South. Their prospects are bright and brightening, and not many days will pass before they will be in the very height of prosperity." This concern is running on full time with a full force of hands, and looking through the market for additional hands which it will need in a short while to fill contracts already booked. In addition to this, it is in correspondence with clients which will swell the orders sufficiently to keep the works busy through the winter and well into spring. Sales now embrace the two Carolinas, Virginia, West Virginia, Mississippi, Georgia and Alabama. This concern is exhibiting a memorial window for a Baptist church at Florence, S. C., representative of an immersion scene, which is attracting much attention. The scene is a river in which appears the administrator of the rite and the candidate, the one in his clerical robes, the other a female figure in white robes, both figures standing in the stream waist high in the water. In the distance are rolling hills, while on either hand is seen the green banks of the river. The expression on the face of the administrator is that of consecration and devotion and is very expressive of the solemnity of the occasion, while that of the candidate is one of utmost faith and confidence in the step she is taking, blending with her expression that of modesty in being made an exponent of her faith in her Redeemer. Altogether the work is one of high art and reflects credit on this Virginia enterprise, which gives us pleasure to refer to as a Southern institution.

### TRADE LITERATURE.

THE A. A. Griffing Iron Co., of Jersey City, N. J., has issued some new circulars of its steam and hot-water heating apparatus, including the Bundy major expansion couplings, to which especial attention is called. The Griffing Company is sole manufacturer of the Bundy patent direct and indirect radiators.

A HEAVY cardboard circular is sent out by the Smith & Kilby Co., Anniston, Ala., giving some useful figures for railroad construction. It gives tables as to rails and weights per mile, spikes per mile and splice-joints per mile of track. This company deals in all kinds of railroad equipment and will quote prices on application.

In the catalogue of C. O. Lucas & Co., Greenville, Ohio, just issued, a detailed account of the "Standard" engines built by this firm is given. Correct principles, the best material and workmanship, durability and economy are shown to be the qualities of this engine. Testimonials of users strengthen the claims of the manufacturers.

A PAPER on cableways, read by Mr. Spencer Miller before the American Society of Civil Engineers, has been published in pamphlet form by the Lidgerwood Manufacturing Co., of New York, and will be sent to anyone interested on application. The paper is a careful review of the subject, and is of interest historically as well as in an engineering sense. The development of the cableway is clearly outlined, and some well-executed illustrations add to the interest.

"OUR SHARE IN COAST DEFENCE" is the title of a pamphlet sent out by the Builders' Iron Foundry, Providence, R. I. The publication illustrates and explains the construction of 12-inch return mortar carriages built at these works for the United States government. The description given will be of especial interest to engineers, machinists and others who desire to be familiar with what is being done by the government towards protecting our coasts.

A NEW illustrated catalogue and price-list for 1894-95 has been issued by the Sebastian Lathe Co., of Cincinnati, Ohio, manufacturer of engine and speed lathes. The company also deals in planers, shapers, drill presses and machinists' tools and supplies. The Sebastian Company's plant is equipped with all the latest machine improvements and its lathes are made by skilled workmen, besides being subjected to careful

inspection and actual operation before leaving the factory. Correspondence solicited.

A COMPACT catalogue of belting, hose, packing and all kinds of mechanical rubber goods has been issued by the Boston Belting Co., of Boston, Mass. The pamphlet is fully illustrated and will be found a hand reference book for dealers and consumers. This company has been in business sixty-five years, and in a few short interesting chapters tells some of the things learned about belting and the transmission of power by long experience and close observation. The information is instructive and calculated to be of benefit to all power users.

### What the Women of Memphis Are Doing.

THE MANUFACTURERS' RECORD has repeatedly told of the remarkable work that is being done by the business men of Memphis, and especially by the active spirits that put into existence and that have kept in active operation the Young Men's Business League. The work of this association, which has already secured the investment of over \$2,000,000 in the establishment of manufacturing enterprises in Memphis, is best seen in the steady increase in the clearings of Memphis's banks, running now from 30 to 40 per cent. a week over 1893.

In discussing this subject some days ago Mr. Thomas Boggs, the first secretary of the Young Men's Business League, told an interesting story of the work that has been done by that body. A year or so ago the business men of Memphis realized the fact that there was comparatively little room for expansion in the mercantile interests of the city unless there could be a broadening out of its manufacturing business. Memphis already held a leading place in wholesale trade and controlled the business over a large territory, but this failed to give steady employment to its increasing population. It was seen that Memphis must develop its manufacturing business. The Young Men's Business League was organized. For the first few months it was unable to show any tangible results, but when the machinery was in full working order it commenced to attract manufacturing enterprises. One good concern after another was secured. The location of these various enterprises commenced to attract wide attention, and Memphis for the past twelve months has stood out conspicuously before the country as one of the most progressive and prosperous cities of the South. But Memphis was not content to secure factories without having a market for its products, and so the women of Memphis have now inaugurated a movement which is worthy of special notice, whatever may be the final outcome. At a public meeting attended by several hundred of the leading women of the city a lecture was delivered, showing how the people of the city failed to purchase home-made goods. Memphis mills turned out a first-class flour, but Memphis housekeepers bought Western flour; Memphis factories make good shoes, but found little demand at home in competition with Northern shoes. The women determined to inaugurate a new system; they started out to buy home-made goods. If their grocers supplied them with any other than Memphis flour it was promptly returned, and not only must the flour be made at home, but the barrels or the bags in which it was packed must be made in Memphis. Instead of buying New England shoes they concluded that shoes made in Memphis were equally as fine and desirable. Memphis shoes they found would wear equally as well as Northern shoes. The result is that all Memphis is stirred up in a crusade on the part of its women, who are determined that Memphis-made goods shall find a Memphis market. There is, of course, a limit to which this spirit can be judiciously extended, but, properly managed, it is a move in the right direction. The South must learn to consume its own products to a greater extent than it has done in the past. The writer once saw flour being shipped

from Norfolk to New York, and was told by an officer of the steamship company that the Norfolk people refused to buy home-made flour, and so the mills shipped it to New York, where it was branded with the name of some fictitious Northern mill and came back on the same steamer and was sold to Norfolk people, of course with the freight and other expenses added. The South's advancement must for years to come furnish a market for many manufactured products of the North, but the more the people of this section learn to utilize their own resources, to make their own furniture, their own agricultural implements, their boots and shoes and clothes, etc., and the more these things are consumed at home, the more rapidly will the wealth of the South increase.

### Do You Want Machinery?

If so, examine the advertising pages of the MANUFACTURERS' RECORD, where you will find the advertisements of 500 or 600 of the leading machinery manufacturers and dealers of the country. There is hardly any line of general machinery that cannot be secured from some one or more of our advertisers, but if you cannot find what you want in our advertising columns, write to the MANUFACTURERS' RECORD giving particulars of the machinery desired, and the information will be secured for you free of cost.

### Increased Train Service to Rehoboth, Del.

The Pennsylvania Railroad Co. announces that, beginning Saturday, July 7, train No. 305 will be extended to run through to Rehoboth, reaching that point at 8.00 P. M. Connecting train leaves Union Station, Baltimore, at 3.00 P. M. Returning, train No. 392 will leave Rehoboth at 7.20 A. M., arriving at Union Station, Baltimore, 12.35 noon week-days. This service is in addition to train now leaving Baltimore at 6.25 A. M., arriving at Rehoboth 12.15 noon, and returning leaving Rehoboth at 3.05 P. M., arriving at Baltimore 8.40 P. M. week-days.

### Summer Vacation Tours.

The Baltimore & Ohio Railroad Co. now has on sale at all its offices east of the Ohio river a full line of tourist excursion tickets to all the lake, mountain and seashore resorts in the Eastern and Northern States and in Canada. These tickets are valid for return journey until October 31. Before deciding upon your summer outing it would be well to consult the Baltimore & Ohio book of "Routes and Rates for Summer Tours." All Baltimore & Ohio ticket agents at principal points have them, and they will be sent post paid upon receipt of ten cents by Chas. O. Scull, general passenger agent Baltimore & Ohio Railroad, Baltimore, Md.

### Two Delightful Tours to the North Under the Personally-Conducted Tourist System of the Pennsylvania Railroad Co.

To Watkins' Glen, Niagara Falls, Thousand Islands, Rapids of the St. Lawrence, Montreal, Au Sable Chasm, Lakes Champlain and George, Saratoga, Highlands of the Hudson.

First tour, July 17 to 30.  
Second tour, August 21 to September 3, 1894.

Round trip, \$90.00; children between five and twelve years, \$75.75, covering railroad and boat fare for the entire round trip, parlor-car seats, meals en route, hotel entertainment, transfer charges, carriage hire, etc., in fact every item of necessary expense. The tourists need provide themselves with no funds beyond a few dollars for incidental or chance purchases they may be inclined to make; and in every case the best entertainment will be offered, as the leading hotels have been selected in each stopping place, and regular rates are paid, placing the tourist on an equal footing with other guests.

As the number of tickets to be sold for these tours will be limited, those contemplating the trip should secure tickets and Pullman, hotel and other accommodations as far in advance as possible. We will be pleased to send an itinerary to anyone contemplating the tour on application at this office, 200 East Baltimore street, passenger agent Baltimore district, Pennsylvania Railroad Co.

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### Deer Park, on the Crest of the Alleghenies.

To those contemplating a trip to the mountains in search of health and pleasure, Deer Park, on the crest of the Allegheny mountains, 3000 feet above the sea level, offers such varied attractions as a delightful atmosphere during both day and night, pure water, smooth, winding roads through the mountains and valleys, and the most picturesque scenery in the Allegheny range. The hotel is equipped with all adjuncts conducive to the entertainment, pleasure and comfort of its guests. The surrounding grounds, as well as the hotel, are lighted with electricity. Six miles distant on the same mountain summit is Oakland, the twin resort of Deer Park, and equally as well equipped for the entertainment and accommodations of its patrons. Both hotels are upon the main line of the Baltimore & Ohio Railroad, have the advantages of its splendid vestibuled limited express trains between the East and West. Season excursion tickets, good for return passage until October 31, will be placed on sale at greatly reduced rates at all principal ticket offices throughout the country. One-way tickets reading from St. Louis, Louisville, Cincinnati, Columbus, Chicago and any point on the Baltimore & Ohio system to Washington, Baltimore, Philadelphia or New York, or vice versa, are good to stop off at either Deer Park, Mountain Lake Park or Oakland, and the time limit will be extended by agents at either resort upon application to cover the period of the holder's visit. The season at these popular resorts commences June 23. For full information as to hotel rates, rooms, etc., address George D. DeShields, manager, Deer Park, or Oakland, Garrett county, Md.



# Bond Offering

(WITH STOCK PARTICIPATION)

## THE CENTRAL NATIONAL BANK

OF WASHINGTON, D. C.

(Corner Pennsylvania avenue and Seventh street, N. W.)

WILL RECEIVE SUBSCRIPTIONS FOR

# \$300,000

Of the 1st Mortgage 6 per cent. Gold Bonds of THE WASHINGTON AND CHESAPEAKE BEACH RAILWAY COMPANY.

Denominations, \$100 and \$500.

Date, November 1, 1893; due November 1, 1923.

Optional after 10 years at \$105, with interest.

Sinking Fund \$50,000 a year.

Interest Coupons payable May and November 1.

### American Security and Trust Company Trustee for Bonds.

PRICE—Par flat, giving purchasers the benefit of about two months' interest now accrued thereon and 50 per cent. stock bonus—that is,

EACH \$100 BOND AND \$50 OF STOCK FOR \$100 CASH.

EACH \$500 BOND AND \$250 OF STOCK FOR \$500 CASH.

NO SINGLE SUBSCRIPTION ON THESE TERMS SHALL EXCEED \$10,000, AND THE RIGHT IS RESERVED TO CLOSE THE SALE UNDER THIS OFFERING ON ONE DAY'S NOTICE AND TO AWARD SMALLER AMOUNTS THAN ARE SUBSCRIBED.

### BONDS ARE NOW READY FOR DELIVERY

Statement, in Brief, of the Company's Present Condition and Prospects,  
by H. C. Speer, Vice-President.

THE WASHINGTON AND CHESAPEAKE BEACH RAILWAY COMPANY is a duly organized corporation, under the general and special laws of the State of Maryland, with a capitalization of \$1,500,000 and an authorized issue of \$1,000,000 1st mortgage, 6 per cent., thirty year gold bonds, redeemable after ten years at \$105 and interest. Interest payable semi annually on the 1st days of May and November, each year.

The Railway Company owns seven hundred and eighteen acres of land at CHESAPEAKE BEACH, for which it has a corporate charter with all the powers and privileges of a city, in the name of "CHESAPEAKE BEACH." This property has a frontage on the Bay of nearly three miles, and covers ONE OF THE FINEST BATHING BEACHES IN THE COUNTRY.

It is now being laid out and graded for occupation. Contracts for over \$100,000 worth of lots have already been made to people intending to build cottages as soon as the road is finished. "CHESAPEAKE BEACH" lies twenty eight miles southeast of Washington.

The title to the company's property, and the proceedings in the matter of its incorporation, the issuance of its stock and bonds, are all certified to be good and regular as shown by the following certificates of Hon A. H. Garland (ex-Attorney General of the United States), and the Hon. Joseph W. O'Neill, General Counsel of the Company.

WASHINGTON, D. C., MAY 21, 1894.

This certifies that I have examined the General Statutes of the State of Maryland, governing the incorporation of Railway Companies, and the proceedings taken in the incorporation and organization of the Washington and Chesapeake Beach Railway Company thereunder, and find the said Company was duly and legally incorporated and organized in all respects in compliance with law.

I have also examined Chapter 301 of the Act of the General Assembly of Maryland, passed at its January Session, 1892, being an Act to amend the Charter of the Washington and Chesapeake Beach Railway Company, and also the proceedings of the said Railway Company taken thereunder, and I find the same to be regular and in all respects in compliance therewith and that such company is in unimpaired possession of all the rights, franchises and powers granted by both the General Statute and this Special Statute.

I have also examined the proceedings of said company relative to, and the deed of trust executed by it to the American Security and Trust Company, of Washington, D. C., dated December 5, 1893, to secure the payment of One Million Dollars of First Mortgage Six Per Cent. Thirty-year Gold Bonds, together with the bonds thereby secured, dated the 1st day of November, 1893, and I find the same to be regular and in conformity to the General and Special Laws under which the Company is incorporated and is operating, and that the deed of trust named is a good and valid first lien upon all the lands, franchises, railway and property of every kind now owned or that may hereafter be acquired by the Company.

I have also examined the title to the property known as "CHESAPEAKE BEACH," and I find the same to be good in the Washington and Chesapeake Beach Railway Company, subject only to the Deed of Trust above named.

Very respectfully,

A. H. GARLAND.

WASHINGTON, D. C., February 20, 1894.

Mr. H. C. SPEER, Vice-President, Washington, D. C.

DEAR SIR—In accordance with your request of February 12, 1894, I have made careful examination of the proceedings had in the matter of incorporation and organization of the Washington and Chesapeake Beach Railway Company under the General Public Statutes of Maryland, and of the "Act to amend the Charter of the Washington and Chesapeake Beach Railway Company, being Chapter 301 of the Acts of the General Assembly of Maryland, of 1892, and of the proceedings of the stockholders and of the board of directors of the said company thereunder, I am of the opinion—

1. That said company was duly and legally organized and is now in full possession of all its rights and franchises and corporate power.

2. That it has power to construct, equip and maintain a railroad; to own all the usual collateral properties of Railway companies, and to buy, own and sell, lease or otherwise dispose of lands and premises at its terminal on the Chesapeake Bay in the aggregate of 3000 acres.

3. That it has full power and authority to issue bonds, and to pledge its railway, corporate franchises, real estate and personal property acquired and to be acquired as security for the same.

I further certify that I have examined the proceedings authorizing an issue of One Million Dollars of the Company's First Mortgage Six Per Cent. Thirty-year Gold Bonds

and the securing of the said Bonds by a Deed of Trust to the American Security and Trust Company, of Washington, D. C., and I find such proceedings in all respects conformable to the requirements of law, and that such bonds are valid and binding obligations of the Company according to their tenor, and legally secured by said Trust Deed as the first and best lien on all the property and profits of said Company.

I have also carefully examined the title deeds to said Company's real estate especially described in said Trust Deed, and I find the title in said Company to be free, clear and unincumbered, save and except the said Deed of Trust securing this issue of Bonds.

Very respectfully,

JOSEPH W. O'NEALL,  
General Counsel.

## Cost of Construction.

THE WORK OF THE CONSTRUCTION OF THE ROAD IS PROGRESSING RAPIDLY, requiring the road to be completed in all respects ready to operate September 15, 1894. The work on the great pier (2000 feet long) is nearly finished. THE WORK ON THE THREE MILE BREAKWATER, GRAND PROMENADE AND BOULEVARD has been commenced and is being pushed as rapidly as possible. The great Draw-Bridge (the largest single span plate girder bridge in this country) has been finished and is now ready to go in place.

THE COST OF THE COMPANY'S PROPERTY AT "THE BEACH," its charters, franchises, privileges, contracts, rights of way, surveys and construction work to the present time amounts to \$1,304,056.69, as follows:

|   |                |
|---|----------------|
| Real estate, rights of way, charters, franchises, contracts and privileges, paid in stock at par..... | \$1,000,000 00 |
| General expense account (cash).....   | 28,534 30      |
| Construction account (cash).....  | 271 447 67     |
| Office furniture (cash).....  | 1,464 72       |
| Telegraph line construction.....  | 2 610 00       |
| Total.....  | \$1 304,056 69 |

THE TOTAL COST OF THE COMPANY'S PROPERTY WHEN ROAD IS COMPLETED AND EQUIPPED, based on existing contracts, will be \$1,657,747.32, as follows:

|   |                |
|---|----------------|
| Bay property, right of way, charter privileges, etc.....  | \$1,000,000 00 |
| Cost of roadbed.....                                      | 290,712 32     |
| Cost of tracks, stations, shops, tanks, bridges, etc..... | 151,135 00     |
| Cost of equipment.....                                    | 165,900 00     |
| Cost of general and engineering expenses.....             | 50,000 00      |
| Total.....  | \$1 657 747 32 |

Estimated Value of Company's Property and Other Assets When Road is Completed, as Follows, to Wit:

|   |                |
|---|----------------|
| Bay property, based on sales already made.....            | \$2 017,600 00 |
| Right of way, charter, franchises, privileges, etc.....   | 350,000 00     |
| Roadbed at cost.....                                      | 290,712 32     |
| Cost of tracks, stations, shops, tanks, bridges, etc..... | 151,135 00     |
| Cost of equipment.....                                    | 165,900 00     |
| Cost of telegraph line.....                               | 5 000 00       |
| Total value.....  | \$2 980,347 32 |

### TOTAL LIABILITIES:

|   |                |
|---|----------------|
| Capital stock.....  | \$1,500 000    |
| Bonds authorized.....   | 1,000,000      |
| Estimated value of property in excess of both bond and stock obligations..... | \$2,500,000 00 |
| Estimated value of property in excess of both bond and stock obligations..... | 480,347 32     |

## Estimated Earning Power.

THE ESTIMATED EARNINGS OF THE COMPANY PER ANNUM, compiled from calculations based on the most conservative plan, will be as follows, to wit:

|   |              |
|---|--------------|
| 400,000 round trip passengers from Washington at 60c..... | \$240,000 00 |
| From Baltimore and other places, proportion of fare.....  | 100,000 00   |
| Express and extra baggage.....                            | 50,000 00    |
| Local and general freight.....                            | 50,000 00    |
| Mail and Telegraph Service.....                           | 10 000 00    |
| 200,000 tons coal at 50 cents.....                        | 100,000 00   |
| 500,000 bushels oysters at 10 cents.....                  | 50 000 00    |
| Rents of privileges at the "Beach".....                   | 50 000 00    |

|   |              |
|---|--------------|
| Total.....  | \$650,000 00 |
| The estimated total expenditures for general operating expenses, maintenance and repairs will be..... | \$357,500 00 |
| The annual fixed charges (interest and sinking fund).....   | 110,000 00   |

Total..... \$467,500 00

ON THIS BASIS OF EARNINGS AND EXPENSES there will be a balance of \$182,500 after paying all charges, that will go to the benefit of the stock, or over 12 per cent., WHICH DEMONSTRATES BEYOND PERADVENTURE THAT THE BONDS OF THE COMPANY ARE A SAFE 6 PER CENT. INVESTMENT, WHILE THE STOCK SHOULD BE EVEN MORE VALUABLE.

Entirely aside from earnings expected investors should observe that the sale of the company's property at the Beach will rapidly retire all bond and indebtedness, leaving the road unincumbered, after which time all earnings over operating expenses go to the benefit of the stock.

THE COMPANY HAS SEEN FIT TO OFFER a certain portion of its bonds (which are secured both upon the Beach property and the railway property now owned or that shall hereafter be acquired) to the Washington public, with the extraordinary benefits of 50 per cent. stock participation, for the reason that the enterprise is distinctly a Washington affair, in which every citizen is directly interested, and from which every property holder will benefit, whether a shareholder or not, by the successful completion of this greatest of Washington attractions; besides that, the management desires to give such benefits as the Company can afford to those who will be patrons of the road and the Beach in preference to those who usually secure the cream of such enterprises. Every citizen of Washington is also in a better position to judge of the certainty of the financial success that is bound to follow the opening up of this great resort, to and from which they can go at any hour of the day at the nominal cost of 60 cents. Professional railway men and those who have made examination of the work done and being done declare that the estimates given by the company are far below what the actual results will be.

WASHINGTON, D. C., June 23, 1894.

H. C. SPEER, Vice-President.